REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

HEARINGS

BEFORE THE

SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

S. 2431

A BILL TO AMEND AND EXTEND THE SOLID WASTE DISPOSAL ACT, AS AMENDED, FOR TWO YEARS

S. 2432

A BILL TO AMEND AND EXTEND THE SOLID WASTE DISPOSAL ACT, AS AMENDED, FOR TWO YEARS

APRIL 26 AND JUNE 24, 1982

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REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

MONDAY, APRIL 26, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, D.C.

The subcommittee met, at 10:05 a.m., in room 4200, Dirksen Senate Office Building, Hon. John H. Chafee (chairman) presiding.

Present: Senators Chafee, Gorton, Randolph, and Hart.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. I want to welcome everyone here this morning for the hearing on the reauthorization of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976.

I especially want to welcome Ms. Rita Lavelle, who will be testifying on behalf of the administration.

We are reversing the order a little bit this morning in that we are taking a panel before the Administrator, something we normally don't do. But some of the members of this panel have travel complications. In order to accommodate them, we are putting them on first.

This is an important program to all members of this subcommittee and to the full committee. So we are going to listen to your testimony with interest.

The act, as you know, requires EPA to issue and enforce regulations governing the disposal of various solid and hazardous wastes. In addition, the act provides assistance to States and municipalities and regional authorities to aid them in planning disposal facilities which meet the standards of the act.

Last Thursday, along with Senators Stafford, Randolph, and Mitchell, I introduced a bill to authorize appropriations for RCRA for 1983 and 1984. We feel the States play a key role in implementing the provisions of the act, and therefore we provided significantly more funds for the State grants than the administration requested in its authorization bill. The bill as introduced does not contain substantive changes to the act. From the comments I have received and from the testimony I have looked over before this hearing, it does not appear that substantive changes are necessary. However, we will consider the record and assess the needs for amendment based on the testimony we hear.

There are two common themes that run through any discussion involving RCRA. One is that EPA does not vigorously enforce the regulations and standards, and the other is that there aren't regulations there to implement the law. So I am interested in hearing what the witnesses say about those issues.

One issue that concerns me regarding my State, Rhode Island, is that the new hazardous waste treatment disposal facilities are not being established. The first panel is going to deal with the siting of the hazardous waste facilities. So we are interested in this. It seems that everybody wants to have hazardous waste disposal sites as long as it is in the adjacent State. I hope the witnesses today will give us some help on that matter.

It is interesting and appropriate that waste management groups, private groups that are trying to solve this problem with sites, and environmental groups appear in the same panel. Both groups have the same objective, and that is the safe and effective management of hazardous waste. So we are interested in their comments. We expect this will be a very informative hearing, and I want to thank you all.

Senator Gorton, we welcome you. If you have a statement, this is the proper time for it.

Senator **GORTON**. Thank you. I am ready to hear the witnesses.

Senator **CHAFEE**. All right, we will go ahead with the first panel. We have Senator Carol Amick, cochairman of the Massachusetts Joint Committee on Natural Resources and Agriculture; Dr. Joel S. Hirschhorn, project director of the Office of Technology Assessment; and Philip Palmer from the Du Pont Co., representing the Chemical Manufacturers Association.

Senator Amick, you have a statement with some charts, and to the extent you can summarize this—obviously this will be in the record—it will be helpful to us. We have quite a few witnesses, and if they can each restrict his or her remarks to 5 minutes that will be helpful.

Why don't you proceed, Senator.

STATEMENTS OF HON. CAROL AMICK, STATE SENATOR, COCHAIRMAN, MASSACHUSETTS JOINT COMMITTEE ON NATURAL RESOURCES AND AGRICULTURE; JOEL S. HIRSCHHORN, PROJECT DIRECTOR, OFFICE OF TECHNOLOGY ASSESSMENT; AND PHILIP A. PALMER, DuPONT CO., REPRESENTING THE CHEMICAL MANUFACTURERS ASSOCIATION

Senator **AMICK**. Thank you, Mr. Chairman and committee members. I am pleased to be here this morning, and I appreciate your taking me out of turn because I have to get back to my own senate in Boston.

I am here this morning, as you mentioned, representing the Massachusetts Senate. I chair the committee on natural resources and agriculture and have written key elements of our hazardous waste management law of 1979 and our hazardous waste siting law of 1980. As well, I am representing the National Conference of State Legislatures who, as I am sure you are aware, is interested and active in the pursuit of the States' involvement in this issue. I want to address the critical need they believe we have for a strong Federal-State partnership in hazardous waste management.

My purpose today is to address an effort which has traditionally not been considered an integral part of the RCRA law, and that is the siting of new hazardous waste facilities. I believe, and NCSL believes, the actual siting of facilities is now and should remain the prime responsibility of the States. However, I hope to demonstrate today while States have put in place new procedures which will allow technically sound and publicly acceptable decisions to be made, the States' successes are going to be crucially dependent on any action that is taken by the Federal Government as it implements RCRA and Superfund.

You are aware that legislatures around the country are keenly aware of the growing interest in safe disposal facilities. Spurred by the enactment of the RCRA law and the growing evidence of public health threats around the country, State legislatures, including Massachusetts, many of them have framed comprehensive hazardous waste management programs.

The 1979 law that Massachusetts passed allows us to gain our interim reauthorization under the Federal RCRA program. When we passed that law, we in the legislature recognized that we could not merely suggest that State environmental agencies permit or license siting facilities in the ways in which they would have sited solid waste disposal facilities or other of those kinds of activities, that there had to be much more public involvement, a process that brought the public along to understand how important this issue was and to understand that the siting of technically feasible facilities was possible. So we set up a special commission to just deal with the siting issue, and a year later—and I served on that commission—we passed our 1980 siting laws.

The Massachusetts law is unique, I believe, in the country because it retains our strong New England tradition of providing home rule. It gives the people in the proposed host community the final say and the final decisionmaking power to accept or reject a facility. The local community cannot, however, on the basis of subjective, emotional reasons merely turn down a facility. Instead, the siting law requires the local community conduct a detailed technical analysis of the proposal and must review the proposal in terms of standards that the community is already using to site other industrial activities. So that it compares existing industrial activity to the siting of hazardous waste facilities. Then if the community decides after this detailed review to reject a proposal, the State has no power to veto the local community's decision.

Senator Chafee. Let me ask you that one again. If the community finally turns it down, did you say?

Senator Amick. Yes.

Senator Chafee. Then the State has no power to veto?

Senator Amick. That is correct. The developer could take the community to court, and the law is very specific in its identification of the kinds of issues that the community can look at as it is analyzing the proposal—for example, the financial capability of the developer to construct the facility, to maintain the facility in an environmentally sound manner, to operate, to deal with the closure and postclosure; the site itself, whether the site is over potential or existing groundwater supply, drinking water supply; the transportation network in the community—all of these factors and more are outlined to give the community the feeling that the State is not going to force a site down their throats.

Senator **Chafee**. What is a community, a town?

Senator **Amick**. Yes, the town, a town where a proposal for a site may be offered.

Senator **Chafee**. Thank you.

Senator **Amick**. But the community cannot turn down a proposal, as I said, for emotional reasons. It has to come up with definitive reasons for rejection, and we are hoping that through this process the communities will begin to realize that technically sound hazardous waste facilities are no more dangerous and of no greater risk than a lot of other industrial activities that are already in the community, getting the community and residents to see there is industry in their community that is generating hazardous waste and getting them to understand there is technology available to safely neutralize or stabilize or incinerate that hazardous waste. And we believe that we will find cities and towns that will, after going through this process, come to the same conclusion.

We also have set up, Mr. Chairman and members of the committee, a 21-member State safety council, which is supposed to be an independent State body separate from the various State environmental agencies that give the first review of a proposed facility, to make a determination whether that proposal is environmentally sound, is technically sound. And if they make that determination, they then pass on to the local community, that so-called host community, the proposal for further investigation. This may take a year, a year and a half for this process to work, but we believe it will ultimately eliminate the many years of lengthy litigation that have occurred in other States where State government has tried to force a facility onto a local community when the community has been opposed.

I also wish to point out that our legislature's focus on hazardous waste facility siting is not unusual to the rest of the country. The attached compendium and some other information that is on the way to your committee, prepared by the National Conference of State Legislatures in cooperation with the National Governors' Association and other organizations, contains abstracts of 25 State siting laws enacted over the past years. While the procedures and permitting in these laws may differ, the basic objective is the same. Each State has developed procedures to assure that sites are constructed in a technically sound manner and with substantial input from the affected public.

I think that it is important to point out these 25 States with the greatest need for disposal or treatment capacity have recognized the shortcomings of their past permit system and have created these new, innovative approaches to siting. Clearly, as we States have recognized the past approaches needed to be augmented, and particularly on the heels of Love Canal and some of our other instances, we understand the importance of having citizen involvement in the siting decision.

The importance of citizen involvement and of some of the other issues I have already addressed, that of having information about the technical operation of the proposal, information about the risks of catastrophic or insidious danger, what benefits might accrue to the community that accepted a site, having Government have sufficient expertise and resources available to judge the merits of a site decision operation, all of these are suggestions that are highlighted by a recent report prepared for the EPA by Centaur Associates.

Now let me turn to an accounting of where State siting efforts stand today. The chart shows the 25 States that have enacted new siting statutes, and 17 now have regulations in effect. Many are beginning to go through their siting process and establish sites.

I have described the role and actions of State government, specifically Massachusetts. I would now like to address what I foresee to be the appropriate Federal role in facility siting and why without a strong Federal presence State efforts to site new facilities may be severely hampered.

First, the Federal Government must assist States in assessing the amount of waste generated. Of the 25 States contacted by NCSL, at least half are presently without accurate accounting of the amount of waste generated within their borders. And as you know, I believe you have heard it testified before, EPA has taken actions which will impede the States' work. For example, the EPA has recently chosen not to require generators to submit annual reports. Instead, they have proposed that they conduct a statistical sampling of about 10 percent of all generators nationwide and then extrapolate information for the whole country based on that sampling. That may be fine for EPA. But how is that information going to help each individual State identify the quantity and types of hazardous waste that they have within their borders? On the other hand, State-by-State generation figures which could be derived from the total universe of the generators would definitely provide major assistance to the States.

The NCSL and State legislatures strongly support the uniform manifest system for the cradle-to-grave tracking of hazardous waste. I know you are aware of what that system does. Congress clearly recognized unless wastes are tracked by such a system, wastes will disappear on route, and that means within your districts as well as mine—along roadsides, in swamps and woods, posing a serious threat to public health and the environment. Such a manifest could provide States with an accurate accounting of the amount of waste being shipped off-site and thus enable States to better assess the need for additional facilities. Remember, if you will, that the EPA's proposal to sample 10 percent of generators rather than requiring an annual report will never address the onsite hazardous waste. It will only gather information, and their manifest will only gather information for materials transported offsite. So it is very, very important that we have a manifest system that covers and provides the information that the States can use. And I believe that, again, proposals by the EPA make the manifest system ineffective and incapable of tracking the flow of hazardous waste.

Senator **Chafee**. Senator, do you think you could highlight some of your principal points because we have your testimony, which is excellent, some of the points you particularly want to stress would be helpful.

Senator Amick. Fine.

The next point that I wanted to discuss is the fact that the States' solid and hazardous waste staffs are being stretched thin by the reduction of Federal grant funds and by EPA administrative restrictions on the use of the remaining funds. I am pleased to hear, Mr. Chairman, you have recommended additional funds in the budget beyond what the administration sought. With the reductions in Federal assistance to the States that mean the reduction of staff available to assist the States, all of our State agencies are going to be spread to very thin in trying to implement their responsibilities under RCRA.

Also, I would like to stress that lack of strong and aggressive effort by the EPA to implement RCRA has stalled State efforts, and I would like to tell you two specific instances that have occurred very recently in Massachusetts to point up this belief.

The first one has to do with a corporation from California that recently came to Massachusetts proposing to site a facility off the Massachusetts Turnpike about 70 miles west of Boston. The corporation proposed the construction of a large, large facility, and the obvious first reaction of the communities where the facility was proposed was very negative. We expect this. We understand this, and also, as I said, understand once the public gets more information and starts analyzing the proposal themselves, we believe that they will change their attitude. But just as this siting process was beginning, the EPA announced that it was suspending its ban on the burial of toxic liquids in landfill disposal areas. That decision caused the California corporation to announce that it was putting on hold its proposal to site in Massachusetts, and the vice president of that corporation stated publicly that he believed there would not be the quantity of liquid hazardous waste available to go into his facility so that it would not be economically feasible for his company to build that facility as a result of the EPA liquid landfill regulation change.

The second example that I want to mention to you is an example of the EPA's proposed amendments to the Clean Water Act which would eliminate the requirement that hazardous waste be treated before entering the sewer systems. That proposal will probably force another company to withdraw from the citing process, and that other company, a company from Connecticut, has many years of experience working in Connecticut neutralizing hazardous waste liquid and is a company that a particular community in Massachusetts is very anxious to see come within its borders. But because of that proposed change by the EPA, that hazardous waste disposal company will probably withdraw. It is just a sad state of affairs, and it is, in my opinion, inexcusable for us to allow these things to happen.

I strongly urge this committee to do all within your power to prevent EPA administrative decisions and regulations, some of which I have mentioned today, from taking effect in these ways because they are, I believe, contrary to congressional intent. You know what the intent of RCRA is. You very wisely passed RCRA in 1976. The EPA's implementation of RCRA so far is leading the Federal Government away from these goals and making it impossible for States to fulfill the responsibilities under the law. I urge this subcommittee to push for an aggressive reauthorization of RCRA as well as any amendments which will bring the EPA implementation back on the right track and follow congressional intent and help us to get sites in line. Do we really want to go back a decade or 100 years and go back to the system where all we did was dump untreated waste into our sewer systems or into our landfills? In Massachusetts, 28 communities have lost all or part of their drinking water supply because of chemical contamination, and we cannot continue to allow this to happen.

So I thank you very much, and I will answer any other questions you may have.

Senator **Chafee**. Thank you very much, Senator.

Senator Randolph has joined us. Senator, if you have an opening statement, we would be delighted to hear it.

OPENING STATEMENT OF HON. JENNINGS RANDOLPH, U.S. SENATOR FROM THE STATE OF WEST VIRGINIA

Senator **Randolph**. I join Senator Chafee in welcoming the witnesses who are here this morning to contribute their views on the reauthorization of the Resource Conservation and Recovery Act. I especially note the appearance of Miss Rita Lavelle, the new Assistant Administrator for Solid Waste and Emergency Response at the Environmental Protection Agency. This program was without leadership for well over a year, and I look forward to working with Miss Lavelle as she proceeds to administer what I perceive to be two of the most important programs at the Agency

I have been concerned with the matter of solid waste disposal and resource recovery since the committee began grappling with these issues in 1965. Our efforts at that time yielded the first Solid Waste Disposal Act, Public Law 89-272.

With the passage of this act, the foundation was laid and the commitment made to seeking environmentally sound methods for controlling the ever-increasing problem of managing solid wastes. As our knowledge has increased with regard to the characteristics of solid wastes as well as the hazards associated with the disposition of many chemicals, we have enlarged the scope of the act to address problems as they have emerged. All too often our hindsight with respect to former practices has cost us dearly as evidenced by the environmental disasters dramatically exemplified by Love Canal.

With the passage of the Solid Waste Disposal Act of 1965, Congress recognized the possiblities of using solid waste as a resource through recycling processes Through amendments passed in 1970 and 1976 a coherent Federal approach has been instituted emphasizing energy recovery and the recycling of solid wastes at the State and local level. I believe that the progress that has been made in this area should be fostered by a continued commitment on the part of Congress and the Environmental Protection Agency to provide support for this program.

The Agency has been slow to meet the responsibilities statutorily mandated by Congress. I have been encouraged recently, however, by the issuance of some of the key regulations with respect to financial responsibility and liability insurance requirements under the act. It is my hope that under the guidance of Miss Lavelle such irregularities as the recent mismanagement of procedures for the disposal of liquid wastes in landfills will not recur.

I do not believe that major revisions of the act are warranted at this time. I look forward to working with the Agency in seeing this program to fruition. Today, I am interested in hearing the comments of the witnesses both from EPA and from other organizations concerning this important program.

Senator CHAFEE. Thank you, Senator. I was interested in your point that, in your view, this act does not need major revisions.

Dr. Hirschhorn, we have 11 witnesses and we have to hold people to 5 minutes. If there is some extra point that has to be drawn out, we will get that. But let's move along if we can.

STATEMENT OF JOEL HIRSCHHORN

Dr. HIRSCHHORN. Thank you, Mr. Chairman, Senators.

My statement responds to your request for our preliminary findings from our ongoing assessment of nonnuclear industrial hazardous waste, particularly as they relate to the problem of siting hazardous waste facilities. I am accompanied by Dr. Suellen Pirages, senior analyst on the assessment. There are two points I will review. First, I will review the basis for citizen concern for siting hazardous waste facilities, and then I would like to discuss an approach to the entire system of managing hazardous waste that could help to reduce the siting problem if implemented in a manner that restores public trust.

On the first issue, a preliminary finding of the OTA study is that public opposition results from a lack of confidence in the ability and intent of Federal and State authorities to protect human health and the environment. OTA finds that there are seven specific areas where EPA activities have provided sufficient cause for citizen concern:

First, an underlying theme in the latest set of proposed EPA regulations for landfills appears to permit contamination by certain compounds where human use of the land or water may not be readily apparent.

Second, current requirements for monitoring activities within any type of facility are inadequate and EPA has indicated that it is considering reducing requirements even more.

Third, EPA has continued to encourage land disposal as a predominate method of hazardous waste management, even though recent studies have shown that relatively new landfills, only 5 years old, have not contained hazardous waste adequately.

Fourth, there is increasing public awareness of the many exclusions in current regulatory coverage of hazardous wastes, including wastes from exempted small generators that currently go to sanitary landfills, and waste being burned in ordinary industrial boilers without safeguards against excessive emissions of hazardous components.

Fifth, EPA has been charged with reducing its efforts in enforcement of even the limited regulations that are in interim status.

Sixth, EPA has done little to encourage reduction of waste generation either through recycle/recovery technologies or through modifications of manufacturing processes.

Seventh, EPA has not funded RCRA-mandated State inventory studies of waste sites and other programs sufficiently, and the trend is worsening.

The American public today is asked to host additional facilities near their homes and work places; yet they are confronted with the spectre of hazardous waste problems such as Love Canal, with continuing reports about budget and staffing cuts for the EPA, and with an awareness of the hesitation or inability on the part of their State to assume responsibility for program activities. Compounding this problem, the public is asked to agree to these additional and necessary facilities in the face of potential regulatory reforms that could relax the present limited performance and monitoring standards.

In sum, the public perceives that effective management of hazardous waste is not receiving priority attention by EPA. As a result, fears are increased and the resolve of citizens not to allow a waste management facility "in their backyard" is strengthened.

I would like now to talk about an effective waste management program as a possible solution to the siting problem.

OTA believes that there are ways to counter the aforementioned trends and to reduce their impacts. If these siting problems are to be addressed, and perhaps reduced, it is necessary to have a national hazardous waste management program that is comprehensive, readily understood by all, and above all which is implemented and enforced in a manner that restores public trust.

If the mandate of RCRA is to be met, certain key management issues should be addressed. First, it must be recognized that industrial waste streams pose varying degrees of potential harm to human health and the environment. Second, application of both existing and newly developed technologies can reduce potential hazards of a given waste stream. Third, extensive monitoring efforts are needed to verify the effectiveness of any technology. Finally, carefully designed siting requirements and criteria are required to reduce the risks of accidental releases.

As part of the ongoing study of nonnuclear industrial hazardous waste management, OTA is developing a basis for defining a management system that would address these issues and which EPA and Congress may wish to examine as an alternative to the current approach. The outline for the system discussed today must be considered only preliminary. Reasons for describing this preliminary work are twofold: One, it is necessary to indicate to members of this committee that there are alternatives to the ad hoc management approach used by EPA; and two, development of a well-defined system based on degree of hazard and with specified criteria for siting and monitoring could restore credibility to the Federal hazardous waste management process, and thus have a positive impact on current siting problems.

In the outline of the comprehensive hazard assessment reduction management system, the key role of both Federal and State Governments——

Senator **Chafee**. Doctor, we have a time problem here. We have 11 witnesses this morning. I don't want to be harsh on anybody because each of you has good things to say. We do have your statements. We need to be tight on the time because there are others that follow. But in fairness to those who come in the last panel, we just have to be harsh on those who appear in the early panel. Here we are with our second witness and we are 45 minutes through the program which is going to last an hour and a half more. So I will let you go halfway through this, which is 3 extra minutes, and then regardless of the import or your statements that are left unsaid, they will have to remain unsaid.

Why don't you stress your main points?

Dr. **Hirschhorn**. The basic idea behind the system is, of course, to relate the actual level of hazard of different waste streams to the kinds of technology one can use to perform this criteria to siting criteria. We feel the basic problem created by early EPA decision emphasized all as lethal.

Senator **Chafee**. Separate them out. What is the next one?

Dr. **Hirschhorn**. That is the main point, Senator.

Senator **Chafee**. Do you think it is possible to do this, and how do you know when somebody shows up with a truck full of drums they are abiding by the mandate of the level of toxicity that has been set? Are you going to test every drum?

Dr. **Hirschhorn**. Well, it is possible to run early tests on waste streams and characterize the waste streams and know what the level of hazard is. A number of States have proceeded with the degree of hazard approach because EPA has not and because it is necessary to develop a scheme like this to eliminate the problem of underregulation of some waste and overregulation of other waste. This is a method to gain greater efficiency. With respect to siting, I think it is important to understand most hazardous waste streams in the Nation are not as lethal or toxic as the public perceives.

Senator **Chafee**. Most of it is not?

Dr. **Hirschhorn**. No, a good deal is not. The point is to get the right degree of regulation, the right technology, the right kind of efficiency for those hazardous wastes that need to be dealt with very stringently.

Senator **Chafee**. Well, I think that is a good point, and I think your early points about the legitimate concerns of the people because of the errors that have been made, the lack of enforcement, the lack of supervision, those are good points, and we will come back to some questions.

Mr. Palmer, from Du Pont, representing the CMA.

STATEMENT OF PHILIP A. PALMER

Mr. **Palmer**. Mr. Chairman, good morning. I had a brief oral presentation and I will cut it even more.

Senator **Chafee**. Well, you get really 7 minutes if you abide by it.

Mr. **Palmer**. The CMA welcomes this opportunity to reaffirm its strong and continuing support for the Resource Conservation and Recovery Act of 1976, as amended, and to urge reauthorization of this important statute without amendment. Sound and comprehensive Federal regulations for the proper management of hazardous wastes should encourage the siting, construction and financing of vitally needed hazardous waste treatment, storage and disposal facilities. Similarly, they should encourage permitting of hazardous waste incinerators and other advanced treatment techniques, while continuing to allow appropriate land disposal of hazardous wastes and to provide a viable permitting scheme for land disposal facilities.

EPA has made commendable progress during the past 3 years in preparing regulations to implement RCRA so as to achieve these purposes. The current administration has recently affirmed its support for a strong RCRA regulatory scheme by promulgating financial responsibility standards for hazardous waste management facilities.

CMA welcomes and supports these financial responsibility regulations. Not only do they affirm the administration's desire to complete the RCRA regulatory scheme, but also they signal that the administration recognizes that a sound balance must be struck and maintained between proper Federal and State roles in the RCRA implementation process.

This subcommittee has expressed a special interest in the problem of siting of new hazardous waste management facilities. Because of wide publicity given certain environmental incidents resulting from past disposal practices and due to the increased national consciousness of environmental and ecological issues during the past decade, siting of new hazardous waste management facilities has become extremely difficult and, in some jurisdictions, impossible. While responsible citizens recognize that the wastes that are an inevitable product of our standard of living must be disposed somewhere, these same citizens remain dedicated to prevention of the establishment of any hazardous waste management facility in their communities. Practically universal prevalence of this attitude is creating a de facto ban against new, more advanced hazardous waste management facilities that could replace existing, less effective ones. As EPA's RCRA regulations take effect, a number of these existing facilities may be forced to close, creating additional pressures for siting of new hazardous waste management capacity. It is for these reasons, among others, that the chemical industry believes it should not be stigmatized by characterizing secondary materials that are beneficially reused or recycled as hazardous waste.

No simple solution to the siting problem exists. Certainly the situation can be improved by restoration of confidence that, under strong Federal leadership, effective regulation of such facilities will take place and provide protection to human health and the environment. Nevertheless, completion of a sound regulatory scheme cannot by itself resolve the State and local political problems posed by hazardous waste management facilities.

Accordingly, CMA favors State-by-State adoption of siting legislation, establishing special hazardous waste siting councils that can certify the environmental compatability and public necessity of new hazardous waste management facilities and resolve conflicts regarding the location of such facilities. A number of States have already adopted such legislation. To aid in this vital process, CMA has prepared and circulated a model statute for the siting, construction and financing of hazardous waste treatment, storage and disposal facilities. We would be happy to furnish this subcommittee and its staff with copies of this proposal.

CMA hopes that enactment of hazardous waste siting legislation along the lines proposed in our model statute, together with a strong Federal leadership in the development of a sound and comprehensive regulatory scheme for hazardous waste management, including strong assurances of financial responsibility, will eventually reduce irrational barriers to facility siting. Unless such barriers can be overcome, construction of advanced hazardous waste management facilities will be prevented.

For the foregoing reasons CMA welcomes the interest of this subcommittee in the siting problem. Congress should continue to monitor this situation to assure completion of the Federal regulatory regime and to assess the progress of States in adopting facility siting laws.

It is important to keep in mind that the chemical manufacturers are increasingly finding ways to make productive and beneficial use of spent and byproducts materials, thereby reducing the volume of wastes that must be disposed. Also, they are seeking means to reduce the amount of such materials initially generated. The chemical industry's priority is to reduce waste generation and to reuse or recycle secondary materials. One important aspect of such resource is burning of byproducts as fuel in industry boilers. Disincentives to such practices should be avoided. EPA is currently undertaking a comprehensive study of the burning of secondary materials as fuel in boilers. CMA members are cooperating in EPA's study. It is our expectation that a thorough study of these burning practices will reveal that high combustion efficiencies are achieved, and that such burning poses no substantial risk of harm to human health or the environment.

In conclusion, CMA supports reauthorization of RCRA without amendment. It is a sound and vitally important statute. Regulatory implementation of RCRA should soon be complete, despite the substantial conceptual obstacles EPA has had to overcome during rulemaking. Completion of the regulatory scheme should enhance public confidence that hazardous wastes will receive safe management. Restoration of confidence, together with the creation of State siting councils, may lessen current local political hostility to siting of needed hazardous waste management facilities. Beneficial reuse and recycling of byproducts and spent materials can minimize the generation of and need for disposal of hazardous waste, and accordingly such practices should be encouraged.

Thank you.

Senator CHAFEE. Thank you, Mr. Palmer.

The problem is, despite what precautions might be taken and all the efforts put forth, no one wants the disposal sites. I am less sanguine than you about the educational possibilities that will come from your siting committees and, when all is said and done, that a site will be permitted. Actually, don't you have a law before your legislature—anybody can put in a law, it doesn't mean it has a chance—that has a 5-year moratorium in Massachusetts? Is that so? Is that going anywhere?

Senator AMICK. No, Mr. Chairman, that bill was filed by one of the members of the siting commission because there has been a problem this past year in Massachusetts in the implementation of our siting law. The various State agencies, in my opinion, and in the opinion of other legislators, have pushed too fast and too hard looking for developers and have upset the local communities, have not gotten the regulations on line. For example, our 1979 management law that just sets up the manifest system, those regulations aren't fully adopted, The 1981 siting statute, those regulations aren't adopted yet. The State agencies went out looking for developers to build facilities and didn't have those basic criteria established, and the public went wild.

Senator CHAFEE. Yes; I am a neighbor, so I know the public went wild.

Have any sites been approved?

Senator AMICK. Not yet, but I was hoping that the site in Taunton would be approved soon. There are three proposals in the works at this time. All of them have run into the same problem that the public says, well, why don't the State agencies have their regulations in place to help us.

The one thing in my testimony that I didn't mention is, you probably are aware, we also in our law have an incentive system which provides a way in which hopefully the community that accepts a facility will see that it is compensated for taking on the extra risk of having that facility within its border. Many communities would never accept any form of compensation, but we believe there are communities because they have such high unemployment levels, because they have so much hazardous waste generated now, will begin to see that maybe a facility isn't such a bad idea, particularly if they can get compensated not only by the developer but by the State.

Senator CHAFEE. Thank you.

Dr. Hirschhorn, you heard what Mr. Palmer said. He seemed to rebut the points you were making. Your points were, if there is adequate education and these points are all taken care of, that sites will presumably be acceptable. But he says no matter what you do, sites don't seem to be accepted.

Dr. HIRSCHHORN. Well, I would point out you need more than rhetoric and PR, you need substance. The public has to understand that EPA is carrying out useful monitoring to protect them from waste facilities. I think there is a tendency to look at the siting by the public as being unreasonable. Well, in fact it is quite reasonable. I think if the public had more information that we have they would even be more opposed to sites. The fact of the matter is that we need some substance, some guts in the regulations here, and we need things like effective monitoring of all types of facilities. We don't have that today.

Senator CHAFEE. Mr. Palmer, you briefly touched on the onsite disposal. How do you do that? You cited the figures that a very substantial portion of the hazardous wastes are disposed of onsite.

Mr. PALMER. That is correct, that is from the Eggart's survey.

Senator CHAFEE. How do you do that?

Mr. PALMER. By many means. We use basically all waste management techniques available today in the country, which would include wastewater treatment type facilities, neutralization and detoxification, incineration, landfills, and other land disposal means.

Senator **Chafee**. What kind of permission do you need to do that?

Mr. **Palmer**. It varies from State to State at this point. Obviously under the Federal scheme we all have interim statutes for those hazardous waste facilities and we have to abide by the regulations under interim status, which are primarily management-type regulations. In addition, many of the States already have some form of hazardous waste regulation on the books and many of these facilities have been permitted previously under State solid waste regulations. So in fact there is a fair amount of oversight of our operations by the States at this point in time.

Senator **Chafee**. What about one of the points you made here that one of the constructive solutions is just not to produce some of the more hazardous waste to start with?

Mr. **Palmer**. Certainly from sheer logic that would be a way to go, and that is the way to go, and we are making strides in trying to produce less waste and recycle those we produce.

Senator **Chafee**. What incentive is there for a manufacturer to do that? He might be missing out on a very successful product he could make a lot of money on. Why is there an incentive for him to produce something that is not highly toxic?

Mr. **Palmer**. I think first of all there is the good old American economic incentive in the sense that any pound of waste disposed of is a pound of material that could have been put into a product in one way or another. So that is very important particularly in the area of rising energy and raw materials.

Senator **Chafee**. But he is shipping it out the door, he is selling it to somebody else. The chemical manufacturer is making a product which is highly toxic but nonetheless very effective in forming some kinds of plastic or whatever it might be, and it sells like hotcakes.

Mr. **Palmer**. You are talking about the toxic product and the waste?

Senator **Chafee**. Well, it might end up with a waste problem down the line for someone else but not the manufacturer, not for the chemical manufacturer.

Mr. **Palmer**. Would you restate the question for me?

Senator **Chafee**. Suppose a chemical manufacturer producing a product that he is selling to somebody making plastic or whatever it might be, that person is caught with the disposal problem, not the manufacturer. Now what incentive is there for the manufacturer not to produce that highly toxic product and spend a lot of money to develop a less toxic one?

Mr. **Palmer**. Well, I would assume that the product he is making has some value to the second party, and the second party within all of industry all sorts of materials go back and forth in commerce. The second party obviously would have the responsibility to dispose of the residue from the use of that material also, and I think that is his proper duty.

Senator **Chafee**. That is right. Do they bear those expenses in mind when they are buying it?

Mr PALMER. I would assume they do because anyone in producing the product has to roll up all the expenses in production of the product and disposition of the wastes which are an aspect of making that product.

Senator CHAFEE. Senator Gorton.

Senator GORTON. Senator Amick, you testified very eloquently on the methods used in Massachusetts and expressed some frustration with EPA in its relationship with you. If there were no Federal act at all, if it simply expired and each State were left to its own devices in this regard, what would the response of the Commonwealth of Massachusetts be? Would your present law be adequate as far as you are concerned for the disposal of such wastes, or would your legislature easily be able to pass laws which would do so adequately?

Senator AMICK. I believe our present siting law is adequate. I have filed this year amendments to our siting law to fine tune it in the face of what occurred last year with the poor implementation of the law by the State agencies. Our siting law allows us to be more stringent than the Federal standards at this time. Many other States, as you know, aren't allowed to do that. So, if that horrible situation occurred that RCRA disappeared and there was no assistance from the EPA, I believe Massachusetts would be able to handle its own problem.

I believe that we should also be helping other States. Not many legislators within Massachusetts perhaps would state or admit to that. But Massachusetts over the years has been perhaps progressive in dealing with some of our problems. And if we can through this cumbersome but hopefully workable siting process site some environmentally sound facilities, then why not be able to take hazardous waste from adjacent areas.

Senator GORTON. Of the 25 States listed in your table that have some kind of statute, how many would you characterize as being as adequate as those of the Commonwealth of Massachusetts?

Senator AMICK. I do not have all the specifics of those 25. Senator Fred Anderson from Colorado is going to be furthering some testimony and he will have additional testimony from the NCSL. The Massachusetts siting law is perhaps more detailed in the process of getting public involvement and getting the public to understand and not allowing them to turn down a facility without good reason. But other States are having successes with State veto powers that in Massachusetts we just never would have reached. I don't know whether it is our New England tradition or what, but we have 351 little cities and towns, and every single one of them is very active in their government and they have never believed in having the State or Federal Government tell them what to do. So, we have to get them involved in finding sites, and I think we will.

Senator GORTON. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you.

Senator Randolph, do you have any questions?

Senator RANDOLPH. No thank you, Mr. Chairman.

Senator CHAFEE. Mr. Palmer, what do you think of the suggestion of Mr. Hirschhorn of gradation of hazardous waste?

Mr. PALMER. I think that is a good idea in theory and practice, but I don't believe the RCRA regulations should be delayed in trying to implement a detailed and very complicated and hazardous system at this point in time. We believe the agency is incorporating as best they can a correct degree of hazardous in their regulations. In a sense, they are proposing a permit by rule for facilities which are only tanks and neutralize materials which are acids and bases, which we believe is a reasonable way of looking at the degree of hazard approach. We believe at this time to get the program under way and moving swiftly that this type of view should be used in approaching degree of hazard.

Senator **Chafee**. I must say the success of industry with the onsite disposal would, I think, present EPA with some constructive ways that it might proceed. What do you think of that, Mr. Hirschhorn?

Dr. **Hirschhorn**. I think it is clear that the larger corporations often do on-site disposal and treatment, have the resources to do it very well. But there is still a large area of concern with off-site facilities. But I think it has been pointed out even some of the regulations are not adequate when you are talking about on-site facilities. Again, I would point out the area of monitoring. I think the way to convince the public that they are being protected is to insure them if there is any release from any sites it is going to be detected by an instrument before it reaches the public.

Senator **Chafee**. Senator Amick, what do you think if we included in the law a provision that we would restore the grants to the States within so many years, if every State in the Nation would have at least one hazardous waste disposal site?

Senator **Amick**. Massachusetts could live with that. I can't speak for the other States. I feel that the Federal Government should be providing assistance to the States so that they can enter into regional cooperative agreements if need be. Your State, for example, may not generate as much waste. Is it fair for your State or is it economically feasible for your State to be considering the kind of multimillion dollar facility that I am sure you and I are thinking of rather than entering a regional agreement?

Senator **Chafee**. Well, our State is very strong for a regional setup as long as it is in Massachusetts or Connecticut or somewhere else.

Senator **Amick**. I will invite you to the opening of our facility.

Senator **Chafee**. We will be there with bells and sighs of relief. I wish you well, and I wish I could share your optimism that some sites will be developed under your proposal, which I think is a good one. And I hope it does produce some sites.

Thank you all very much for coming. We appreciate it.

Ms. Lavelle, if you would come forward.

We welcome Ms. Rita Lavelle, who is assistant Administrator for Solid Waste and Emergency Response. Is Mr. Alushin with you?

STATEMENT OF RITA M. LAVELLE, ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY MICHAEL A. ALUSHIN, ACTING DEPUTY ENFORCEMENT COUNSEL; LAMAR MILLER, DIRECTOR, PROGRAM COMPLIANCE; AND GARY DIETRICH, DIRECTOR, OFFICE OF SOLID WASTE

Ms. **Lavelle**. Yes, and Mr. Lamar Miller, who is acting director of program compliance, and Gary Dietrich, director of the office of solid waste.

Senator **Chafee**. Why don't you proceed with your statement, Ms. Lavelle, and then we will have some questions. Your statement will go in the record, and it is, I notice, somewhat thorough.

Ms. **Lavelle**. I will shorten it up.

Senator **Chafee**. We sure would appreciate that.

Ms. **Lavelle**. Thank you, Mr. Chairman.

I would like to bring my remarks down to three key points, if I might, then it would allow more time for questioning by this committee. We appreciate the opportunity to appear today and look forward to working very closely with this committee. And I certainly appreciate Senator Randolph's remarks earlier.

We at EPA feel we have accomplished a great deal in the RCRA hazardous waste regulatory program. Almost all of the regulations are currently in place and in effect. A decision soon will be made on existing interim status incinerators and land disposal regulations.

Some of the major regulations which we have promulgated include the listing and identification of hazardous wastes; generator standards; transport standards; permits authorizing States' procedural standards, permits for storage, treatment and dispoal facilities; location standards; existing interim incinerator standards; and permitting standards for existing storage surface impoundment.

In addition, some of the people testifying this morning stated we have just promulgated our financial assurance package for closure and postclosure costs and third-party liability insurance.

As part of our regulatory reform efforts we are reviewing the hazardous waste regulations to make them more effective and more workable. Our reviewing will be completed in 1983, and we figure final regulations will be promulgated in 1984.

One other key point I would like to make is we are making significant progress implementing the program. We have granted phase I interim authorization to 29 States and we expect 34 by the end of the fiscal year. We have granted phase II interim authorization to three States and we expect eight by the end of the fiscal year. We are working diligently to process permits and expect to have 800 in review by the end of the fiscal year.

Also, working to achieve a proper balance between State and Federal Government, we in our authorized States are moving vigorously to enforce the hazardous waste program. And I would like, Mr. Chairman, to enter a couple figures, then I will let Mr. Alushin take over.

Both EPA and those States which have received interim authorization have moved aggressively to implement compliance monitoring and enforcement efforts under RCRA. At the Federal level, EPA regional offices conducted a total of 1,742 inspections of generators, transporters, and interim status facilities in 1981 and a total of 564 inspections for the first 6 months of the current fiscal year. Our regions took a total of a 665 enforcement actions in fiscal 1981, including 479 notices of violation and 186 administrative orders. During the first 6 months of fiscal 1982, our regions undertook 292 enforcement actions, including 113 administrative orders and 179 notices of violation.

The States also are assuming a large portion of the monitoring. Available data gathered by the agency thus far has some very positive results. Phase I interim authorized States took so far 3,112 inspections in fiscal 1981 and 1,955 inspections so far in fiscal 1982. So we see there they are well over the 50 percent. These States have also issued 795 warning letters and 322 administrative or judicial orders in fiscal 1981, with 424 letters and 45 judicial or administrative orders thus far in fiscal 1982.

As more of the States are granted interim authorization or advance to final authorization, we anticipate oversight of hazardous waste facilities will improve correspondingly through the joint efforts of this Federal/State partnership.

With that, Mr. Chairman, I would like to turn it over to Mike Alushin.

Mr. ALUSHIN. Senator, I am substituting today for Robert Perry, who has submitted a written statement and met with your staff. He very much appreciates your flexibility in allowing me to substitute for him today and looks forward to working with your subcommittee in the future on this important issue.

In the interest of time, I also will highlight three major points in the written testimony submitted to you. I think the three things I would like to highlight are the relations that we are developing with the Department of Justice in enforcement; I will give the latest statistics on case referrals; and then finally briefly summarize the future direction.

On the relations with the Department of Justice, the remarks appear on page 3 of the testimony. I think the key point is to emphasize a meeting with Carol Dinkins and senior staff at the beginning of April at Quantico, Va. They are attempting to work out a streamlined and improved relations between EPA and the Justice Department on enforcement. That is a very important partnership, as you know, and I think there are two key ideas that came out of that that should be of interest to you.

First is an effort to have the Department of Justice lawyers work closely with the regional staff of EPA in developing case referrals so they can be in from the beginning and help develop good cases in the regional offices, which are the locus for identifying violations and reacting to them. Second, a key point of understanding arrived at was once a case has been put in for enforcement through litigation, that the Department of Justice and EPA will keep that case moving along the litigation track and will not stop the case for settlement discussions. We obviously will be open to negotiation once the case has been filed. But there was a key understanding to keep the case moving.

The second point I would like to highlight for you starts on page 4 of the written testimony, and it is the latest on statistics on referrals being developed and referred to the Justice Department. There are a total of 70 cases which have come in from the regions recently, since March 1, and are in process in Washington to be examined and sent over to the Justice Department as appropriate for civil litigation. I can report to you that of that group, last week we got two of them formally referred to Ms. Dinkins, one a hazardous waste case of environmental waste removal and the other was a Clean Air Act case on Northern Pacific Plywood.

In the criminal enforcement area, again, I would like to highlight for you the activity there. There is an active criminal docket pending. You will see on top of page 6 of the written testimony there are a total of 65 active investigations and referrals, approximately one-third of which are in the hazardous waste area. And our statistics indicate this fiscal year 11 criminal referrals have been made to the Justice Department, 4 of which were in the hazardous waste area.

Finally, on the subject of the future direction, I think I would like to emphasize Mr. Perry's commitment to fairness and consistency in the enforcement program. He has instructed all of us to move forward with enforcement and be fair and consistent in enforcing the environmental laws. That means guarding against ad hoc decisions and interventions on individual cases, but rather moving forward using the enforcement organization as a whole to uniformly process enforcement cases.

That concludes my summary of the highlights of Mr. Perry's testimony, and I would be glad to answer questions you have.

Senator Chafee. Thank you.

Senator Randolph, you had some questions.

Senator Randolph. Thank you very much, Mr. Chairman. I am delighted, as I am sure you and Senator Gorton are, at the presence of Senator Hart, who has had knowledgeable interest and concern in this matter for many years.

We have had the Agency, through various persons, state many times, Ms. Lavelle, that it will take 8 to 10 years to issue permits for the existing hazardous waste management facilities. I say, this is unacceptable. I will ask you later when I finish my brief comments about your feeling of the statement I have just made.

I remember Mrs. Gorsuch testifying at our hearing on the EPA budget. I asked for an estimate of the increase in resources necessary to cut that time in half. I asked for that information, 2½ months ago, and as often happens with EPA, or perhaps it is too prevalent in EPA, no information comes to the committee—2½ months since that was asked for. There may be no one who remembers, but I remember when I wrote, as chairman of the committee, for certain information from EPA, a year went by and there was no reply to the letter. That is all documented. I am not saying things have improved or not improved, but here it is 2½ months, and it was a very simple question that was asked. So I ask it again today. What level of increased funding starting in 1983 would be necessary to cut in half the time which you now indicate it will take to permit existing facilities? You have indicated that storage facilities are a second priority.

Ms. **Lavelle.** We have preliminary figures and I would like to develop them. I apologize for the lack of response to you earlier. I hope with my office this will not happen.

But we show that in order to cut what we currently have, which is our 8-year strategy, as we refer to it, for permitting, to a 4-year strategy, as you are proposing, Senator, it would take approximately 700 State resources and about 200 extra people at EPA within the regions. Additionally, a very conservative figure shows about $30 million in EPA grants and/or salary would be necessary to do this.

There have been some strategies developed to cut the process. One of these we discussed when we talked earlier, and that was the concept of a class permit. However, we are moving as quickly as we can with the resources that we have. Right now we project by the end of fiscal 1982 to have about 800 part B's to be called in and examined on current resources.

Does that answer your question, Senator?

Senator **Randolph.** Well, it approaches an answer. That is very good.

Ms. **Lavelle.** Very good.

Senator **Randolph.** The best part of your answer is that we are going to get an answer when from time to time we get no answers. I don't want to play the role of a carping critic at any time, but this is a committee representative of Congress and committee jurisdiction, one that pioneered this whole subject matter and created the Agency of which you are now a part. We feel that it is not only appropriate but helpful that we have a better dialog than we have had on occasion. Not just for me personally, but for the benefit of all the members of this committee.

This hearing, as you know, Ms. Lavelle, is not limited to a review of subtitle C. It seems strange to me that the only discussion of subtitle D, solid waste requirements and programs, in the administration's testimony should come in a statement from the enforcement office. What is the status of subtitle D? How many States solid waste plans need to be approved? What will EPA do to support the States as they implement the ban on dumps, which was a primary part of our first legislation to stop open dumping in this country, the ban on open dumps and develop compliance schedules?

Now you discuss, in Mr. Perry's statement, the use of the section 7003 orders and suits for solid waste activities, that which may present imminent and substantial endangerment. Wouldn't an open dump which now violates the criteria under the statute, automatically present such a hazard, and why could not EPA use the citizen suit enforcement authority which does apply, and definitely apply, to the open dumping ban?

Do you wish to address these matters?

Ms. **Lavelle.** Senator, subtitle D, the progress there has been pretty good in terms of number of States who have submitted their plans and number approved. We have approved, as of the 26th of this month, 19 State plans. Additionally, there are 23 States who have adopted and submitted to EPA for review their own subtitle D plans and there is a draft plan for 10 more States that we are working with very closely so their draft plans will be in line with what we propose under subtitle D. We project by the end of fiscal year 1982 we will be approving approximately 32 of these plans, and by the end of fiscal year 1983 we expect to approve a total of 41. So our progress in subtitle D's is pretty good at this point.

Now on open dumps and the question of 7003 actions, I might refer this to Mr. Miller, with our office. Lamar, do you want to speak to that.

Mr. MILLER. Of course, the act as we interpret it was designed to turn over a portion of the responsibilities of RCRA to the States. The Agency has taken steps to turn over the subtitle D portion to the States, and the States have picked up that portion of RCRA. We do, however, maintain full authority for enforcement under the imminent hazard provision of the act in the event that any subtitle D facility should create an imminent hazard to take appropriate Federal actions in the absence or in addition to any appropriate State actions. We fully intend to continue to do that. At anytime that any of the disposal facilities, be they subtitle D or subtitle C, create an imminent hazard to either the environment or public health, we will take immediate action.

Senator RANDOLPH. It is a matter of concern, but I think your answer is helpful and I am appreciative.

You don't want to wash your hands of the program.

Mr. MILLER. Not me, sir. I have dedicated a life to it.

Senator RANDOLPH. Yes, sir, and I congratulate you.

Mr. MILLER. If I can add, sir. We look at this act as a partnership role between the States and the Federal Agency. We don't intend to continue to do all of the work effort. And the act does have some very good provisions in it, and the amendments too, which gave rise to very little enforcement activity for a long time because we didn't have rules in place. It took a while to get them there and the only enforcement tool we had was the imminent hazard provision. We have now changed from only enforcement under civil litigation under 7003 to a very strong administrative program, inspections and administrative enforcement by the States, administrative enforcement by the Federal offices, as well as maintaining our imminent hazard enforcement program. So now we are moving on three fronts rather than just one.

Senator RANDOLPH. The members of this committee will be interested in your progress in that area. If you keep us informed it would be helpful.

Mr. MILLER. We would be happy to, sir.

Senator RANDOLPH. One more question. I would like to indicate that there seems to be a large amount of resources going into the development of a so-called "degree of hazard" approach to hazardous waste management. I think you should be very careful in this area, as the statute, Ms. Lavelle, does not support the degree of hazard concept. If you have another feeling about it, I would like for you to state it. It may be timely to have different requirements apply to disposal facilities depending on the wastes which they are permitted to receive, but under the law, I think it is good once again to state, that the difference requirements must vary with the site and not with the waste. So when you say the degree of hazard approach, I hope you will be a little cautious with it. But I am not trying to dictate. Perhaps you will comment.

Ms. **Lavelle**. Thank you. I think I will have Mr. Dietrich comment on that. He has been intimately involved in developing the whole degree of hazard concept.

I would like to say for the record that, unfortunately, Mr. Dietrich is leaving us after 23 years of civil service. His input has been an immense service to the Agency, and he very graciously has agreed to stay on until we have the land disposal regulations written. And he will be sorely missed.

Mr. **Dietrich**. The degree of hazard work we are doing is trying to get a handle on tailoring management requirements for different types of waste. Clearly, as we have looked into this area, it is evident that different wastes have different types of hazardousness, different types of toxicity, and probably should be managed in different ways. I also would agree with the point that you made that the environmental setting also is very, very important in determining the type of management that should be given to waste. I think when we complete our degree of hazard study, we are not, I must emphasize, intending to list all of the hazardous waste under our program in some sort or rank degree of hazard. That is not the point we are trying to get at. What we are trying to get at is identify more stringent and in some cases less stringent requirements than the norm that would be required for different types of wastes. I think this will make for a more efficient and effective program.

Senator **Randolph**. Thank you, Mr. Chairman.

This final accolade. Ofttimes, not just today, I know through staff members of their regard for you and for the work that you have done in these years you have been with the Agency.

Mr. **Dietrich**. Thank you.

Senator **Chafee**. Thank you, Senator Randolph.

Ms. Lavelle, let me ask you about the landfill problem. That is the one that is dominating the difficulties here. Perhaps you were here when Dr. Hirschhorn from the Office of Technology Assessment gave his statement. He was pretty harsh on EPA. He said.

> Although EPA has developed three different sets of regulations governing land disposal facilities, none have been finalized. An underlying theme in the latest set of proposed EPA regulations for landfills appears to permit contamination by certain compounds where human use of the land or water may not be readily apparent. Current requirements for monitoring activities within any type of facility are inadequate and EPA has indicated that it is considering reducing requirements even more. EPA has continued to encourage land disposal as a predominate method of hazardous waste management, even though recent studies have shown that relatively new landfills, only five years old, have not contained hazardous wastes adequately.

The same criticisms, to a degree, were from Senator Amick. What is your response to those?

Ms. **Lavelle**. Thank you, Mr. Chairman.

The fact we are taking so long coming out with the land disposal regs I think is indicative we do not plan for these regulations to be weak and unworkable, which is the case with the past regulations that were promulgated. These regulations will address not only existing land disposal operations, but also will set standards for new land disposal operations. I personally feel that land disposal is not necessarily the predominant technology one must support, but it is part of a mixed technological approach to solid waste and hazardous waste. We, as you have indicated earlier this morning, do need some sort of incentives, and I would hope to look for those in developing new types of technology.

Senator CHAFEE. What new types are you talking about?

Ms. LAVELLE. Neutralization, incineration, detoxification. There are a number of technologies that are currently in use, especially in the larger chemical firms. They are to be congratulated for some of the technologies they have developed. The unfortunate aspect is they aren't available right now in the market for everyone to get.

Senator CHAFEE. Well, one of the problems is—we had the testimony from Mr. Palmer, as you heard, from the Chemical Manufacturers Association—a very substantial portion of all the hazardous wastes are handled onsite by the chemical companies. It seems to me they have developed techniques that for some reason others don't use. Why don't you investigate there, or is that done, and make that the acceptable practice?

Ms. LAVELLE. Mr. Chairman, we have been investigating them. As you well pointed out, over 90 percent of the wastes are handled onsite in terms of industrial hazardous waste, and the companies are to be commended for directions they have taken. However, there are a number of problems when you want to bring this to the market, and this isn't necessarily the responsibility of RCRA but we, as people involved in solid waste and hazardous waste, are very concerned. I would personally like to look toward some sort of incentivizing perhaps through accelerated depreciation or limits on liability for some of this technology to be brought to the marketplace. It is available right now but it is not being brought to the marketplace just because of the various problems associated with the whole area of hazardous waste management.

Senator CHAFEE. What about the burning of hazardous waste in the boilers without regulation by RCRA, is EPA going to establish regulations on that?

Ms. LAVELLE. Yes, Mr. Chairman, and again I ask Mr. Dietrich to address that in more detail.

Senator CHAFEE. OK, Mr. Dietrich.

Mr. DIETRICH. Burning of hazardous waste in boilers in some cases may very well be a problem, an environmental and health problem, and in other cases it may not be. We do have a project underway to develop the data base in which we can propose and ultimately promulgate appropriate regulation with regard to hazardous waste burning as a fuel in boilers. We would hope to have that accomplished, at least gone into proposed rulemaking, in about a year from now. The reason we have not been able to propose a regulation in this area is we have not had the technical data to propose a rule. We are now trying to gather the data, and I think we should be successful.

Senator CHAFEE. It is my understanding since this Act went into effect that only two hazardous waste sites have received the final approval. Am I accurate in that, and if so, what makes everything take so long?

Mr. DIETRICH. I think what you are speaking of is there have been two permits issued to new facilities.

Senator CHAFEE. That is right, two new facilities.

Mr. DIETRICH. Well, you can only issue permits to new facilities when there is an application.

Senator **Chafee**. Your answer is you haven't received any applications?

Mr. **Dietrich**. We have about 30 applications on file. For most of those we have not gotten all the data, a complete set of information necessary to proceed with the permitting. Others we are working on the data, working with a permittee to develop appropriate conditions. An example of that latter case is the I.T. facility down in Louisiana.

Senator **Chafee**. How long does it take for a new permit to be processed?

Mr. **Dietrich**. A simple permit—well, we are new in this business, but a simple permit looks like it will take 2 to 3 months, a complex permit can take 12 to 15 months.

Senator **Chafee**. What do you mean you are new in the business?

Mr. **Dietrich**. There have not been very many hazardous waste permits written to date. We are new in writing permits under these hazardous waste regulations. We don't have any experience yet.

Senator **Chafee**. Well, the act has been on the books for 6 years, hasn't it?

Mr. **Dietrich**. Of course, but we have not written permits under the rules that are in effect as of last January with regard to incinerators, storage, and treatment facilities. So there is going to be a learning curve.

Ms. **Lavelle**. Mr. Chairman, I think that is a key point. Though the act went into effect in 1976, the regulations that we are talking about, that we have to permit under, have only gone into effect in January 1980. It is a point that should be made. So Mr. Dietrich's statement is true. This is the first time we have tried to permit under these regulations as promulgated in 1980, and it was January.

Senator **Chafee**. But if anybody ought to be familiar with the regulations it is you folks, you wrote them.

Ms. **Lavelle**. You are right, but it took an awful long time to come out with the regs, and probably indeed the most major regulation we are coming out with is the land disposal reg.

Senator **Chafee**. My time is up.

Senator Gorton, do you have questions?

Senator **Gorton**. I don't have any questions, Mr. Chairman. I would like to say while Ms. Lavelle is here, on one element of her responsibility of Superfund, I should like to express a great deal of pleasure at the speed which EPA authorized funds to clean up a very, very extensive area of Commencement Bay in Tacoma and authorizing a longer range contract with the State of Washington and private contractor to develop a cleanup plan for that entire area, which is in very, very serious condition, and her cooperation with my office in doing so. You are subject to a great deal of criticism. When you do something right, I think you ought to be told.

Ms. **Lavelle**. Thank you, Senator. Our overworked employees in the Superfund area will appreciate your comments.

Senator **Gorton**. Thank you, Mr. Chairman.

Senator **Chafee**. Senator Hart.

Senator **Hart**. I would like to put a statement in the record, if I may.

[The statement referred to follows:]

OPENING STATEMENT OF HON. GARY HART, U.S. SENATOR FROM THE STATE OF COLORADO

Senator HART. I commend the chairman for holding today's hearing on one of the most serious environmental and health-related issues facing us today—management of hazardous wastes under the Resource Conservation and Recovery Act of 1976.

Hazardous industrial byproducts exist to some degree in nearly every community in the United States. The Environmental Protection Agency regulates an estimated 40 million tons of such wastes annually. These are nothing more than poisons—poisons that, unless carefully handled, transported, and disposed, threaten our children, our homes, and our communities. Unless they are effectively managed, these poisons have the capability of disrupting the entire ecological chain of life.

Effective management of these wastes by Government and industry is critical. These wastes are not limited to one environmental medium; they simultaneously threaten the quality and vitality of our soil, our water, and our air. Several alarming incidents and discoveries in the 1970's alerted Congress to the need for comprehensive laws to govern all aspects of hazardous waste management. Thus, in 1976, Congress approved and the President signed into law the Resource Conservation and Recovery Act, vesting the EPA with certain tasks and authority governing the manufacture, handling, transport, and disposal of hazardous substances.

Now, nearly 6 years after RCRA was passed and in view of continued delay and indecision by the EPA, the American public legitimately questions how far we've progressed in this area. RCRA's statutory language was structured to allow the EPA needed flexibility and time to analyze and develop workable standards for industry to follow. This is a lengthy and complex process, and Congress acknowledged this when RCRA was passed. Unfortunately, because of internal disorganization, inadequate budgetary resources, and an apparent policy of inaction, the EPA under this administration has reversed the slow progress begun in the late 1970's.

The EPA over the past 15 months has put a premium on deregulation and budget cuts in key areas of hazardous waste management. Promulgation of standards governing landfilling, boilers, and small generators has been delayed and, in some cases, indefinitely postponed. Crucial reporting requirements have been deferred.

RCRA, as with any law, cannot be viable without an effective enforcement program to back it up. Enforcement is the catalyst of all Federal regulation. The RCRA enforcement program under this administration has been plagued by confusion, delay, and inaction. This not only fails to force compliance, but encourages defiance and continued violation of the law.

Because many State hazardous waste management programs mirror RCRA, failure at the national level guarantees and compounds failure and lack of enforcement at the local level. In my own State of Colorado, officials are often left in a quandary because of EPA policy reversals and a lack of crucial standards governing, among other things, hazardous waste landfills.

Mr. Chairman, I would like this hearing to explore these issues. Unless reversed, this lack of commitment by the only agency vested with the authority to protect and enhance our environment will have profound repercussions for our public health and environmental sanctity.

I am interested in your last comment, Ms. Lavelle, in the connection that Mrs. Gorsuch appears here saying we can do with fewer employees and do a better job. Are you disputing that?

Ms. **Lavelle**. No, I wouldn't want to dispute that, Senator.

Senator **Hart**. So your employees aren't overworked, in other words?

Ms. **Lavelle**. They are overworked sometimes. When we were dealing with Senator Gorton in the Commencement Bay issue, they worked quite a bit of overtime.

Senator **Hart**. I think Senator Chafee was getting very close to the kind of concern I have, and that is there is a massive discrepancy in perceptions of what is going on. Your appearance and testimony suggests we are moving right along and we are on a learning curve and things are proceeding and you are toughening up these regulations, and so forth. That is not my perception and I don't think it is the general perception. I could be wrong, the press could be wrong, and the American public could be wrong. I think there is a frustration on the part of the legislators when a law is passed and 6 years go by before it begins to be effective. When we are constantly told that agencies have enough employees and that they can, in fact, cut back by a third or a half and still do the job, and yet months and months and years go by and regulations aren't promulgated on the grounds that these are complex subjects, I think the American people get frustrated. Congress acted in 1976. It is now 1982. The question I have is why?

I want to get to the fact that the administration—you did not testify here today to the administration's proposed amendments to the act, and I would like to get your views on those—but before I do that, I would like to review the statistics, as I see them, that I think were contained in some of the testimony this morning.

Let me read to you cases forwarded from the EPA regional offices to EPA headquarters since the act was established: 1977, 262; 1978, 412; 1979, 257; 1980, 313; 1981, 66. Civil actions sent by EPA to the Justice Department: 1977, 204; 1978, 363; 1979, 254; 1980, 252; 1981, 79.

I think Mr. Alushin's testimony reflects the fact there has been a flurry of actions reported at both those levels in the last couple weeks. One might ponder to what degree this was in preparation for this oversight hearing, but I wouldn't want to ponder it too long.

What all this shows is about a 79-percent drop in cases reported from regional offices to the headquarters from 1980 to 1981. Why is that? A 69-percent drop in cases referred to Justice from the EPA in the course of 1 year, and the dropping or decreasing of key reporting requirements that were the only means of enforcement.

Would you care to comment on this?

Ms. **Lavelle**. Senator, there definitely has to be a push from both the State and Federal level in these areas. I think perhaps too you should take into account the administrative orders. Our philosophy would be to go toward the concerted push in the administrative order flexibility which the act gave us as written, for a couple reasons. One, that you can get quicker resolution without having to go through the courts, and second, that these are more easily implemented with a lower level of resources.

I did cite some figures in my testimony which prove that we are committed to this, this being, namely, enforcement when necessary.

Perhaps Mr. Miller would want to comment a little bit on this since he has lived through both administrations here.

Mr. **Miller**. Is living through that called surviving?

Ms. **Lavelle**. Surviving.

Mr. **Miller**. I assume the numbers you are using are total case referrals. They include air, water, and hazardous waste. They seem to be those.

Senator **Hart**. They are an attachment to Mr. Perry's testimony.

Mr. **Miller**. Those are total civil actions by the Agency, all types—air, water, and hazardous waste. I think if we looked into those numbers a little bit more deeply we would find in 1977, 1978, and 1979, there were essentially no hazardous waste cases. They began to come forward in late 1979, 1980, and 1981, and we had something like a dozen—I don't remember the numbers exactly, I can submit them for the record—in fiscal year 1979; about 30 in 1980; and about 20 or so in fiscal 1981. So the numbers are not substantially different for those particular activities. I think of the 60-some odd Mr. Alushin referred to currently in headquarters, 19 are hazardous waste cases. So that if you took a roughly 3-year period and averaged the 3-year exercise, I think you will see we are pretty consistent on hazardous waste 7003 type cases.

I would also point out while much ado has been made of the 7003 filings during 1981, that was at a time when we had the hazardous waste enforcement task force, whose sole charge was to refer case. That is all we did. Referring cases and prosecuting cases is something different one from another. And once you build up a backlog of 50 or 60 cases you have referred, somebody has to carry them through the prosecution. I would point out during this year we have obtained already nine consent decrees. Last year we obtained 10. We are moving. We are not not doing anything. We are prosecuting the ones——

Senator **Hart**. I didn't say you aren't doing anything. I am suggesting a trend.

Mr. **Miller**. The other point was one I tried to bring out a minute ago. While we were filing 7003 actions, that is the only authority we had. Now that we have rules on the book we are making full utilization of the 3008 consent order mechanism as well as administrative orders under 7003. We have got four of those I think right now on the books, four 7003 administrative orders, which a year ago under the system in effect a year ago would have all been civil litigation. But they have settled and the cleanups are ongoing at the moment under the administrative authority of the act.

Senator **Hart**. Thank you very much.

Ms. Lavelle, would you care to comment on the administration's bill—I think it is S. 2431—and the repeals it suggests in the current law?

Ms. LAVELLE. I am sorry, Senator, I am not familiar with that bill.

Senator CHAFEE. That is the administration's bill on this, isn't it?

Senator HART. It is a bill the administration has recommended to change the law we are holding oversight hearings on.

Ms. LAVELLE. Well, I am sorry I am not familiar with it. It is embarrassing to admit, but I am not familiar with it.

Senator HART. Perhaps we will hold another hearing, Mr. Chairman, and get some testimony on that.

Senator CHAFEE. I would think so.

Ms. LAVELLE. If you want, Mr. Chairman, I certainly could study it and supply comments for the record.

Senator HART. Mr. Chairman, I wonder if any of the other witnesses are prepared to comment on that bill?

Senator CHAFEE. Well, this is the administration's bill that you sent up here on February 23 for the reauthorization of the Solid Waste Disposal Act, as amended by RCRA, for the next 2 years, and that is what Senator Hart is asking about. Does anybody have any comments? You make some changes in the existing law, far more than the changes that we do in the bill which Senators Stafford, Randolph, Mitchell, and I have submitted.

Mr. DIETRICH. Mr. Chairman, I believe that our request is basically twofold: To seek extension of the general appropriation authorization and to delete a number of specific appropriation authorizations in the statute. That second part is based on two concepts. One is that those activities, if they are carried out, or to the extent they are carried out, can be covered by general appropriation authorization in the statute. The second part of the rationale is that the activities that we are asking for a deletion of specific appropriation authorization are activities that we no longer believe should be carried out. The administration has made those determinations in its budget determinations. Specifically, technical assistance, or technical assistance panels activity——

Senator HART. Excuse me. You are telling us what the request is. What we want is some justification for that. We can read the bill. I think what we want are the reasons why you are seeking repeal of current provisions of public law while most people up here believe the current law is adequate, if it were enforced.

Mr. DIETRICH. I think the justification is in the budget context this administration is determined that all of our activities under this statute should be directed and focused almost exclusively on subtitle C, hazardous waste activities, and that the activities heretofore carried out by the agency, that is, nonhazardous waste activities under subtitle D, should be left to State and local jurisdictions; second, that technical assistance that heretofore the agency provided to State and local jurisdictions, as well as some of the resource recovery activities particularly in the municipal waste area, are also activities that don't have a high Federal priority. Those are basically budget determinations that this administration has made, and that is the rationale.

Senator HART. Well, I think there must be an Aesop fable in here somewhere, where the administration shows up and says we can do the job with fewer people, give us less money, and then comes up piecemeal and says because our personnel and budget have been cut we think we ought to repeal some sections of the law so we can use the resources we have more effectively. Fascinating situation. The kitten chasing its own tail around.

One last question, Mr. Chairman.

Senator Fred Anderson, the president of the Colorado Senate, will testify shortly—we have his testimony—about the problems the States are having. He is here on behalf of the National Conference of State Legislatures, in trying to get cooperation with the Federal Government. We have heard testimony about how things are going so smoothly with the States and how we are giving so much more authority to the States. His testimony suggests the opposite. He is critical of EPA implementation because of the delays and inadequacies in regulations. He says those delays have kept the States from acting because they don't know what the final Federal regulation or requirements will be. He points out, I think appropriately, some substantive inadequacies in the law and the implementation.

My own contact with the government of the State of Colorado suggests the same thing. You can't get answers from Washington. There seems to be confusion, lack of direction. That seems to me to run contrary to what you have said here. Would you care to comment on that?

Ms. LAVELLE. Mr. Chairman, having been in the saddle only 2 weeks now, I would like to say while I was there as a consultant we have been moving very quickly toward promulgating some workable and enforceable regulations. I think you are right. As I pointed out to Senator Chafee, it is sad the act was enacted in 1976 and it took to 1980 to get some regulations in line.

Second, RCRA was written and will be implemented as a States' bill, namely, that all of these authorizations should be taken over by the States as soon as they are capable of taking them over, and I would hope to administer the office and sign off on the regulations with that guidance in mind.

Senator HART. What if the States testify they are not prepared to take them over, is that still going to be your position?

Ms. LAVELLE. Well, they have that option; that is their right to either accept or not accept. And if they do not accept, it is a Federal responsibility, as outlined in the act.

Senator HART. Thank you.

Senator CHAFEE. Thank you, Senator.

I would like to ask in connection with the enforcement efforts, it seems to me that the enforcement of the regulations and the role of EPA is essential if we are going to succeed here. We have heard the statistics. We heard Ms. Lavelle stress that enforcement efforts are going to be vigorous.

Let's take one specific case, the Ralston-Purina case last spring in Louisville, when a release of an effluent into the sewage system blew it up and it cost the Federal Government millions of dollars to make the corrections. It is my understanding the agency has not sought any reimbursement from Ralston-Purina, and why not? Are you intending to seek it? It seems to me this is a clear case of a release as defined under Superfund as a violation of the law. What is the answer to that?

Mr. ALUSHIN. We have looked into that issue, and I am informed by staff that have called the Federal Emergency Management Agency [FEMA], who had been active in that issue and ended up having to address the problem themselves and spending a lot of Federal money under disaster relief. I am informed from them that the explosion occurred in February 1981, which was very soon after the Superfund statute was passed. As of that time, the Presidential Executive order implementing Superfund had not been signed. I am informed by them, and they called up and asked if it could be handled through Superfund, the event happened to occur at a time prior to when Superfund was set up and ready to work. That is why FEMA decided to declare a Federal disaster.

Senator CHAFEE. I am not arguing with FEMA having spent the money. I am arguing with whether you are going to collect.

Mr. ALUSHIN. Because it was not handled under the Superfund statute, we are not filing Superfund reimbursement. I don't know the extent to which FEMA can collect reimbursement for money it has spent.

Ms. LAVELLE. Mr. Miller might have some comments.

Mr. MILLER. I am not certain of the exact condition. I am sure we can get a background paper. It is my understanding that case was handled in two ways. One was under the Clean Water Act which, as you well know, we could go back and seek reimbursement. But the other one was under a criminal prosecution, which we did in fact prosecute and, as I understand, were successful.

Senator CHAFEE. Well, I would be interested in having some information on that if you could provide it.

Ms. LAVELLE. We will be glad to supply that.

Senator CHAFEE. I don't think we have any further questions.

Senator Randolph?

Senator RANDOLPH. Only 30 seconds of comment, Mr. Chairman.

Ms. Lavelle, you said you have been in the saddle for how long?

Ms. LAVELLE. About 2 weeks now.

Senator RANDOLPH. Are you able to tell us now whether you are riding a docile horse or a bucking bronco?

Ms. LAVELLE. I think a bucking bronco.

Senator RANDOLPH. Thank you.

Senator CHAFEE. Do you have some intentions in modifying that small generator exclusion in connection with the hazardous waste disposal in sanitary landfills?

Ms. LAVELLE. Actually what we are talking about is 700,000 generators. We do have some dispute with OTA; where they are showing 10 percent we are showing 1 percent. I would hope to supply for the record a critique of their figures there.

I think when you are talking 700,000 generators that are putting out a small amount of waste, theoretically it is even homes that could be doing this——

Senator CHAFEE. But the limits are quite high.

Ms. LAVELLE. 1,000 kilograms per month. That is not that high. I think the proposal is to bring it down to about 100.

I think, Mr. Chairman, the larger question here is what should be the regulatory authority——

Senator CHAFEE. Could we put that in tonnage and pounds? Is it 1.7 tons per month? Whatever it is, we are talking tons, not pounds. This is substantial, in my judgment.

Mr. DIETRICH. 2,200 pounds a month; 1,000 kilograms a month is 2,200 pounds a month.

Senator CHAFEE. This isn't any household. We are talking tons.

Ms. LAVELLE. No, it is a cumulative effect, 2,200 pounds.

Senator CHAFEE. Per month?

Mr. DIETRICH. Per month.

Senator CHAFEE. Per small generator. This isn't the household running out there if it is disposing of that much a month.

Ms. LAVELLE. That is the top exemption.

Mr. DIETRICH. It is not an exemption. It is a special requirement that says people who generate less than 1,000 kilograms a month do not have to comply with all of the requirements of hazardous waste regulations if they deliver those wastes to either a subtitle C facility that is statute permitted or to an industrial facility that is approved by the State. Now the question is not that we don't wish to regulate those folks, the question is to what extent are you going to regulate those folks. There are 700,000 of them. They include 10,000 secondary schools; 10,000 gas stations; several thousand mortuaries; many, many nurseries that grow plants. Do we want those people to have to manifest their waste, to label and placard their waste, to keep all the reporting requirements, or do we want a simpler set of requirements that still says they cannot deliver to just anybody but instead should deliver to an approved facility. We have chosen to do the latter. We will continue looking at that question to see whether it is causing health and environmental problems.

It is my private feeling that our focus not be to put a lot of administrative requirements on a lot of small generators but rather put our focus in on assuring that so-called nonhazardous land disposal facilities, and landfills in particular, and nonhazardous incinerators in fact meet a set of requirements that can handle those types of waste. That is where our focus should be, rather than put a lot of administrative requirements on small generators.

Senator CHAFEE. So, in summary, it would not be your intention to change those requirements as far as to change the definition of a small generator?

Mr. DIETRICH. As far as I know it is our intention to always look at these, including this issue with regard to whether it should be changed. And yes, 6 months, 1 year, 18 months from now, if we have evidence that indicates we should change this requirement in part or in whole, I am sure the Agency will propose to do so.

Senator CHAFEE. Fine. Thank you all very much.

Ms. LAVELLE. Thank you, Mr. Chairman.

Senator CHAFEE. All right, we have had 2 hours for four witnesses and we have seven witnesses left. We will give each panel a half hour. If the panel of Mr. Nosenchuck, Senator Anderson, and Mr. Payne could come forward.

Mr. Payne, we welcome you here from our home State.

I see we also have a senator from Colorado, and perhaps Senator Hart would like to comment.

Senator HART. Mr. Chairman, I would like to welcome a distinguished fellow Coloradan here. Senator Anderson has been a force in public life in my State for many years, a very positive force. We are proud to have him here. He represents not only the State Senate of Colorado but also the National Conference of State Legislatures. I for one am very pleased to have him before the committee.

Senator CHAFEE. Thank you, Senator.

Why don't we start off with Senator Anderson because Senator Hart might have to leave.

Senator, why don't you proceed. We are going to have to be quite strict with the 5-minute rule.

STATEMENTS OF SENATOR FRED ANDERSON, PRESIDENT, COLORADO SENATE, CHAIRMAN, NATIONAL CONFERENCE OF STATE LEGISLATURES NATURAL RESOURCES AND ENVIRONMENT COMMITTEE; NORMAN H. NOSENCHUCK, PRESIDENT, ASSOCIATION OF STATE AND TERRITORIAL SOLID WASTE MANAGEMENT OFFICIALS; AND KENNETH PAYNE, EXECUTIVE DIRECTOR, RHODE ISLAND LEAGUE OF MUNICIPALITIES

Senator ANDERSON. Thank you, Mr. Chairman, members of the committee.

I am appearing today on behalf of the National Conference of State Legislatures as well as the State of Colorado Senate. We are concerned about further delays, modifications by EPA in promulgation of RCRA regulations that are beginning to impact on State hazardous waste management programs.

I think in talking about this the proper management of solid waste has been a significant environmental problem as legislatures as a whole have been in the process of facing this issue. NCSL firmly believes that the State should continue to have primary responsibility for the management of hazardous waste, and yet States find themselves highly dependent upon the Federal Government to complete technical studies and to promulgate hazardous waste management regulations which they are expected to use to frame State programs. The 1980 amendments to RCRA recognized that the Federal hazardous waste management program, with which States programs must be consistent and equivalent, would serve as a minimum national standard. Virtually all State legislatures have enacted legislation in response to RCRA's goals and objectives. As we go through this, we want to emphasize that in passing such legislation, State legislatures are often under the pressure of balancing two different and sometimes competing problems: One, to assure general citizenry demands that health and environment be adequately protected, and two, to take into account the demands of the regulated community that the State impose "no more stringent" requirements than the Federal Government, so that they would not be at a competitive disadvantage with industries in other States.

States have framed legislation in one of three ways: Consistent and equivalent with the Federal program; no more stringent than the Federal program; at least as stringent as the Federal program.

I might inject here, there has been, and I think it might be a brutally frank statement, the States as a whole are less than completely trusting of the Federal system and what may or may not emanate from Congress and the regulatory agency. Consequently, we have looked at this no more stringent language and have legislated that way.

Consistent and equivalent is another way. West Virginians find themselves in real trouble here because the contention is every time there is a void in the regulatory coverage created by a shift in Federal policy, then the State is going to be challenged on the appropriateness of the State action.

The problem we have in Colorado, we have "no more stringent" language, and this creates a problem here because if there is no language and we cannot be more stringent then, is there in fact regulation of any kind? In 1980 the interim committee we had in Colorado recommended that Colorado should not establish a State hazardous waste management program because of the comprehensive nature of the Federal program. Rather, the committee recommended that the State's existing solid waste siting law be updated to include hazardous waste and give more control of siting decisions to local governments.

Then during the 1981 session we have two different bills that were put through—one following the committee recommendation, the other much more stringent. Finally the leadership got together and we passed senate bill 519, which was a compromise of the two.

We are again finding problems. For example, if Federal standards are suspended or delayed but may be reimposed in the future, can the Department of Health act in areas where a void exists in Federal law?

Our law doesn't go into effect until 1983. We wanted to take the time to give interested parties to convince the general assembly the State didn't need a program. This portion of the law also assumed the adequacy and comprehensive nature of the Federal program.

I think what we are looking for in going along with this, we had this recent problem on the ban on liquid landfills. At the time we heard about it, the general assembly passed a resolution memorializing the EPA to continue the ban. Between the relaxation of the ban and the possible changes in the financial responsibility requirements, some legislators in Colorado feel the program is no longer strict enough.

In this period of high unemployment and call for regulatory reform, the regulated community's arguments of high compliance costs and being placed at a competitive disadvantage carry great weight. The practical political result is that the minimum Federal requirements have become the maximum State requirements, even those States which have traditionally been strict in the way of environmental laws.

To summarize, Mr. Chairman, members of the subcommittee, I think we need to look at it this way: Recognize there is in fact a problem there. And it is like a lot of other problems we as legislators face for solution, in some ways you might term it a "dirty" problem. Nobody wants it in their neighborhood, but it is something that needs to be done. What we are pleading for and hoping we will get is consistency, something we can rely on. Because in my committee this past week—I am talking about the National Conference of State Legislatures—we went through the sorting out of Federal programs. This is not a position of NCSL, but my committee recommended the State assume the responsibility here and run this portion through the trust fund. We are willing to do this, but we want Federal standards that give us some guidelines so we know the environment is in fact being protected.

Perhaps the greatest concern I have, and after watching a certain television program last night one of my concerns in this whole area is I see to much of a Hollywood horror movie approach to scare everybody to death. We have enough of a public relations problem as it is. But if we go out and harangue about this, in my opinion take a Chicken Little approach, we are doing a great disservice to the Nation. What we need to do is understand the problem, get consistent regulatory control, whereby the States know exactly what their role is, what our role should be.

And we are willing to assume. You heard Senator Amick from Massachusetts state that earlier. We are working with adjacent States for site disposal. We are willing to work together. We just want to know what the ground rules are. Let's approach it with a cool mind and, like all other problems that have faced us in the past, I am certain with a little considerate thought we can handle this.

Senator CHAFEE. Thank you, Senator.

I wasn't quite clear what you meant by the competitive disadvantage. Is it if you enact to stringent laws, that will impose a financial burden on your industries?

Senator ANDERSON. Yes, specifically to that question, very much. That was a concern, that if you go entirely too stringent you are going to move an industry out of a State that is going to go to another State, and you begin to have this—it is a competitive disadvantage, and it is something that shouldn't happen because certainly it will not lend support to cleaning up the environment.

Senator CHAFEE. Do you think, given the laws on your books, that your counties or cities or however you do it will indeed set up sites?

Senator ANDERSON. Yes, I think they will. We are in the process of looking at two different ones and, as Senator Hart knows, we are having difficulty with one site at the Lowery location, but right now there are two others that are being proposed. Public hearing have been held. And I grant you it is an extremely contentious hearing process. In our State we used to think we only fought over water rights, but this is becoming just as contentious as an issue of that nature and people turn out for those hearings.

Senator CHAFEE. I bet they turn out, and I bet they turn out saying let's not have a site.

Senator ANDERSON. No, but not from a narrative approach. And this is what I would like to see this approach from a cool point of view. There has been too much heat generated from a fear point of view instead of an educational point of view. Certainly there are these horrendous examples. You were mentioning just before this the Ralston-Purina example. We have the Hamstead example, all of these things are going on that can be exercised.

Senator **Chafee**. Did you hear Dr. Hirschhorn's testimony? Were you here for that?

Senator **Anderson**. Yes.

Senator **Chafee**. Well, his thrust seemed to be that the people jolly well had reason to be scared.

Senator **Anderson**. I am acknowledging there is a problem. My point is if we have the consistent rules and regulations, if they are there in place so that the States know—I think that there is a misunderstanding, if you want to put it that way, that the States are refusing to act in this area. The political pressures at home are such in fact it took us less than 2 days to get that resolution through on the ban on the liquid waste disposal question. I will tell you the people that carried the resolution I think in the past would have been surprised. But they are concerned because the constituency is concerned, and they are going to answer this problem. They want it done right.

Senator **Chafee**. I am not surprised the resolution went through quickly. What worries me is that there doesn't seem to be a thrust to get the sites developed, or built or created, and there is all kinds of pressure, rightfully so, to restrict where the site can be. That is understandable. But the reverse side doesn't seem to be there. I don't know where our industries are going to be able to put this stuff and I am afraid we are going to see more midnight dumping, the very thing we are trying to avoid.

Senator **Anderson**. Mr. Chairman, that is one of the major concerns I have. In fact, when you were talking with the prior panel about the small generator situation, I hope personally from my point of view they continue that exemption or this monitoring without putting them through the whole process, because I think the 700,000 generators across the country, there is the group that is going to do the midnight dumping. I am certain that is where it will take place. So I am looking at what we are working with now from a compact point of view with the other States. We are looking with the idea this can be made economically feasible for the host State.

Senator **Chafee**. Senator Hart.

Senator **Hart**. Mr. Chairman, I would like to ask Senator Anderson whether he or the national conference believes any substantive changes should be made in the act.

Senator **Anderson**. I think what we are looking at now more than anything else is consistency. We want to know where we are—this is through the regulatory process—what you are going to do. We went through this. Let me give you an example. We went through the whole OSHA bit and we were told the Federal program was going to be thus and so, and if you had a State program this was going to happen, and if you didn't have a State program this would happen. After Colorado put in the program, followed all the guidelines, we found out there were two parallel programs going so we just pulled out. And I wouldn't want to see that. I look at this problem somewhat as I do the whole corrections problem. Everybody thinks community corrections is an ideal solution to incarcerating people and one they will endorse, but yet they don't want it in their community.

Senator CHAFEE. Mr. Nosenchuck.

STATEMENT OF NORMAN H. NOSENCHUCK

Mr. NOSENCHUCK. Thank you, Mr. Chairman, for inviting me to testify today. I am testifying as president of the Association of State and Territorial Solid Waste Management Officials. I am the director of the division of solid waste for the New York State Department of Environmental Conservation. As director of the division of solid waste in New York State, I am responsible for the State nonhazardous and hazardous waste management programs, including Superfund-related activities.

Mr. Chairman, adequate management and enforcement of solid waste and hazardous waste programs of the Resources Conservation and Recovery Act is not happening and will not happen under the current Federal strategy of thrusting more and more responsibility onto the States and at the same time decreasing Federal support for RCRA-required activities. States have always had the responsibility to establish State laws and regulations for effective management control of solid and hazardous waste within their borders. The Resource Conservation and Recovery Act and the regulations implementing RCRA are designed to provide minimum national standards in the solid and hazardous waste management areas and provide for State-to-State consistency.

When Federal assistance to the States under subtitle D of RCRA was terminated on September 30, 1981, the States were left holding the bag as far as the State nonhazardous solid waste management programs were concerned. Additionally, with the current proposed 16 percent Federal budget cut for assistance to States under subtitle C, section 3011, from $41.7 to $35.1 million, we have found that at least 10 States, including New York State, will consider withdrawing from the RCRA hazardous waste management program.

In this connection, Mr. Chairman, I would like to enter into the record an article of April 21, 1982, that appeared in the Albany, N.Y., Knickerbocker News. (See p. 144.)

In the Solid Waste Disposal Act amendments of 1980, Congress added a new section 3012 to RCRA, requiring each State to undertake a continuing program to compile, publish, and submit to the EPA Administrator an inventory describing the location of each site within such State at which hazardous waste has at any time been stored or disposed of. Congress authorized $20 million to be appropriated to carry out this section of the law. To date, no money has ever been made available to the States for this necessary work.

The Superfund program is still limping along, hobbled by insufficient information concerning hazardous waste sites within the individual States and territories. The attempt to establish a national list of 400 priority hazardous waste sites requiring Superfund cleanup is hampered by lack of hard data for the national hazard ranking system.

The assistance funds provided previously under RCRA subtitle D allowed many States to identify and categorize their individual solid waste problem areas and to begin to develop their nonhazardous and hazardous solid waste management plans for the correction of these problems. When RCRA subtitle D funding was phased out, many corrective State solid waste planning activities could not be implemented, resulting in the continuation of existing problems. The national open dump inventory has been far more costly and time consuming than originally anticipated—and is still not complete. The States have not been able to provide the funding necessary to carry out the management activities necessary to complete the open dump inventory, and to phase out or bring up to compliance those open dumps that failed the criteria for good operating sanitary landfills.

This is really deplorable. We believe that as a result of the small hazardous waste generator exemption regulations under subtitle C of RCRA, unmanifested hazardous wastes are being routed to private and public landfills that are open dumps. Serious consequences—such as pollution of the soil, surface water, and ground water—could be the result of not phasing out or upgrading these open dumps.

The draft national ground water strategy is predicated upon a strong nonhazardous and hazardous waste management regulatory program.

State and local governments have not been able to successfully assume the RCRA subtitle D solid waste management and resource recovery activities. We have found, in a recent telephone survey of the ASTSWMO membership, that the open dump inventory has been haled in most States that did not complete it, enforcement of nonhazardous solid waste regulations has been slowed, surveillance of landfills has decreased, and user fees have not been used to replace lost Federal funds.

Subtitle D of RCRA should be funded.

Conceptually, the President's New Federalism program is a good idea. Returning responsibility for program implementation to the States with a concurrent phaseout and elimination of the Federal role makes sense. Years of State experience and State resources could be effectively utilized to address unique State concerns and to implement hazardous waste management programs that reflect State priorities.

The reality of the New Federalism, however, is another story. The States were not full partners with EPA in the development of the RCRA regulations that they are now being asked to implement. More dollars are needed rather than fewer dollars to take on the new State hazardous waste management responsibilities under subtitle C of RCRA. Federal financial assistance continues to be the key to a State's ability to establish and maintain a viable State hazardous waste management program.

Senator Chafee. Mr. Nosenchuck, your 5 minutes are up and you are on page 5 of 10 pages. Why don't you summarize the principal points you want to make in the balance of the time.

Mr. Nosenchuck. Yes.

Unfortunately, it appears that the only time the American public provides for environmental protection is when an environmental crisis is at hand. Love Canal in 1978 aroused public awareness in connection with the improper disposal of hazardous wastes. There hasn't been, to date, a major environmental crisis arousing concern for the nonhazardous solid waste management program. However, like Mount St. Helens before it blew, the problem is there and the pressure is building. Why wait for the eruption?

So far, under the current scenario of diminishing Federal assistance, I do not see a national commitment to State RCRA subtitle C hazardous waste management programs, nor a national commitment to State nonhazardous waste management programs. I see laws, rules, and regulations that will not be effectively implemented in the near future. I see States returning their RCRA hazardous waste management programs to the Federal Government. I see the State taking their available resources and reprioritizing their hazardous and nonhazardous waste management activity to protect public health and the environment. I see a lack of State-to-State consistency. I see the Federal Government being asked to enforce RCRA hazardous waste requirements in various States. Where will these Federal funds come from? Let's not kid ourselves—RCRA is in serious trouble.

I suggest if the States are given added program responsibility under RCRA, more, not less, dollars are required.

Mr. Chairman, I would like to submit for the record a copy of the State of Washington "Degree of Hazard Approach to Designating and Regulating Hazardous Wastes," and a copy of a January 27, 1982, letter from EPA to our association committing EPA to the notion there should be an ASTSWMO grant and that our committee should be partners in establishing RCRA program regulations. (See pp. 145 and 147.)

Mr. Chairman, I think it is time for Congress to reexamine the national commitment to effective State nonhazardous and hazardous waste management programs under the Resource Conservation and Recovery Act.

Senator **Chafee**. Thank you very much.

We welcome you here, Mr. Payne. Glad to see a fellow Rhode Islander. If you will proceed.

STATEMENT OF KENNETH F. PAYNE

Mr. **Payne**. Yes, Senator.

Interestingly, with regard to any issue before Rhode Island's cities and towns, second only to schools, I have been dealing more in the last 4 years with waste disposal issues than anything else.

I am very pleased to testify today on behalf of the National League of Cities. Our call is basically to stand firm with the program that you have and to make sure that EPA doesn't waiver in its commitment to enforce RCRA.

There has been testimony primarily today on the hazardous waste portion of the act. I would like to share some observations with you about what is happening on the other portions of the act.

First of all, with regard to landfills and open dumps, within the State of Rhode Island, and I expect other places too, the municipal dumps have been easier to regulate than other dumps, primarily because you don't have the economic motive of a dump owner intervening. As a consequence, we have largely solved the problem in the State with nonconforming municipal dumps. However, we have some very painful situations outstanding with regard to privately owned landfills. The sensitivities run extremely high, and it would be unfortunate at this time if EPA were to consider the job done sufficiently that they backed off and didn't put some spine into the State effort to handle landfills.

Second, with regard to resource recovery planning, what we find is that there have been plans developed by States, including Rhode Island, for resource recovery, often in terms of a technology that is very capital intense, and the result of that has been that these plants have been put on the back shelf because the communities cannot afford those capital expenditures when your interest rates are in the 12- to 14-percent area. There are other technologies, modular technologies, for resource recovery conversion of the waste energy, and those were not as attractive because they are somewhat less efficient and have higher operating cost but have much higher capital cost per ton of capacity. Those are more attractive now and yet there are not the resources how those might be implemented.

Within Rhode Island I think there is a fine opportunity to implement something with regard to modular technology in the city of Newport in cooperation with the Navy. There aren't the technical resources available from EPA or others to qualify that proposal.

Turning now to the subject which has received most of the attention today, which is hazardous waste management, I will observe several things.

First of all, cities and towns have a significant and direct interest in most aspects of hazardous waste management. Cities and towns are sites of current disposal operation, proper and improper. Cities and towns operate landfills which sometimes receive hazardous waste. Local industries require adequate hazardous waste disposal arrangements. Here I want to elaborate and observe that the threshold for small generators presents a small problem.

I was at a public hearing in the city of Cranston, R.I., a very volatile public hearing. One of the things of great interest are facilities needed for industries of our community. When you have a community with a substantial portion of employment that is small generators and we don't have a list of what is being generated, it is very hard to sell the community on the need for that facility when that need is not documented. Now one of the benefits of having small generators included in some fashion is that you then know what they are doing and you can convince the community there is a need for disposal or treatment to handle waste being generated in the community. I think that is an important point in Rhode Island.

Finally, cities and towns will be sites for hazardous waste transfer, storage, treatment, and disposal facilities. What is needed is an unwaivering commitment at all levels of government to handling the problem. It is unreasonable to expect local officials to accept proposals for hazardous waste treatment facilities if the Federal Government is not standing firm in its commitment to regulating the entire spectrum of hazardous waste activity under RCRA. If you back off, I think localities will also say why should which go to the wall on this issue.

Furthermore, especially in Rhode Island, hazardous waste is an interstate problem. Therefore, we do need to have the Federal oversight because it is not just what is generated within our own boundaries that we are talking about, but it is wastes generated elsewhere that are coming into the State. And what we would like to see is there be assurance that waste generated in not only adjoining Massachusetts or Connecticut, but waste generated in fairly far distant States doesn't come into our State not properly recorded and reported so we know what we are receiving and the extent of it.

I have been working hard in Rhode Island with the support of my membership to sponsor a hazardous waste facility management siting law, and that would provide more hazardous waste management facility sites in industrial areas within Rhode Island.

Certainly if you have any questions I would be more than willing to entertain them.

Senator **Chafee**. Well, I hope you are successful in your efforts, Mr. Payne. I think the points you make are very good ones, as did the other members of the panel. This has been a good panel, and we thank you.

The final panel will be Mr. Hanneman, Mr. Mott, Ms. Hall, and Ms. Bloom.

Mr. Hanneman, that is a very formidable looking statement you have got, but the sands of time are running out. Why don't you summarize.

STATEMENTS OF RICHARD HANNEMAN, NATIONAL SOLID WASTES MANAGEMENT ASSOCIATION; RANDY MOTT, HAZARDOUS WASTE TREATMENT COUNCIL; KHRISTINE L. HALL, ENVIRONMENTAL DEFENSE FUND; AND JANE BLOOM, NATURAL RESOURCES DEFENSE COUNCIL

Mr. **Hanneman**. Thank you. I have made an effort to reduce it.

We appreciate the opportunity to be here with you today, Mr. Chairman. I appreciate not only your interest in this subject but your questions to the other panels and Senator Randolph's. We are always pleased to appear before this committee.

I am Richard Hanneman, director of government and public affairs for the National Solid Wastes Management Association, the national trade association representing the waste service industry.

We represent more than 2,000 private companies engaged in the collection, processing, and disposal of solid and hazardous wastes.

We believe that RCRA should be reauthorized without any basic redirection. In evaluating the effectiveness of our waste management program, we need to ask two questions: First, is RCRA working? Second, can it be improved? The answer to each question is yes.

Congress felt in enacting RCRA that if it could set high standards for proper management of wastes, those who generate and handle wastes would be required to pay the full costs of dealing with waste management and that managing wastes would become more environmentally sound. The increased costs of complying with the Federal regulatory program would result in waste reduction initiatives, reuse, and recycling efforts, and induce investments in new and proper facilities.

This theory is working, although the progress has been agonizingly slow.

We want to emphasize specific areas of Agency achievement and eight problems which require serious consideration at the Agency and perhaps by this committee in its oversight capacity.

First, we believe EPA has become much more adept at listening to all sides of the question, especially seeking good technical input.

Second, EPA deserves high marks for developing a uniform national manifest system, a project which had been shelved for several years following enactment of RCRA.

Third, EPA has finally promulgated ultimate standards for hazardous waste management with the important exception of land disposal standards.

Fourth, EPA has become much better at establishing priorities for use of its scarce resources, although we might agree with those who suggest more resources might be required.

Fifth, EPA acted wisely and well, as Senator Randolph noted, in proceeding to publish financial responsibility regulations operating hazardous waste facilities.

Sixth, EPA has placed a high and proper priority on the problems of siting new waste management facilities. Over the past year we have cosponsored siting conferences involving public officials, local residents, environmentalist and industry interests in several parts of the country. In this EPA worked in close cooperation with us, the National Governors' Conference, the National Conference of State Legislatures, several industry groups, the National Association of Counties, and several environmental groups. We have worked closely in Rhode Island, Mr. Chairman, with your Governor and the State liaison on the bill mentioned by Mr. Payne. We do not believe the Federal Government should attempt to legislate siting itself; this is more properly a role for State government, with local participation.

There are several areas that need urgent attention, however.

First, as has been mentioned several times, the regulations have been tardy. This is not a particular indictment of this administration, but has been a characteristic of the program since it was enacted.

Second, EPA is not only late, but it keeps changing its mind, creating problems for both State government and industry. It wasn't mentioned earlier by the statements, but we are familiar with a problem in the State of New Hampshire, where they had a lifetime permit for waste management facilities but switched to a 5-year permit when they thought that is what EPA wanted. Now EPA has returned to a lifetime concept, and New Hampshire is going to have to change its law.

Third, the quality of the regulations needs attention. Just as NSWMA has argued that it makes no economic sense to require expensive treatment for certain waste managed safely using less expensive technology, so does NSWMA recognize that certain wastes should not be disposed of in the land without treatment. EPA should keep working on its degree of hazard system.

We have long advocated strict regulation of the burning of hazardous waste in all types of devices not merely incinerators as in the existing rules. We filed suit in the U.S. Court of Appeals for the District of Columbia more than 1 year ago urging the courts to order EPA to close this loophole. EPA has the authority to regulate all burning of hazardous wastes and if the Agency fails to exercise this authority promptly, we urge the Congress to mandate that the Agency close this gap in the regulations.

Another qualitative problem is the exemption of so-called small quantity generators. We continue to be extremely concerned over the impact of the small generator exemption, not on the hazardous waste industry, but on our other constituency, the solid waste industry; 1.1 tons of hazardous waste per month is not an unsubstantial amount of waste, and it exposes our solid waste handlers that collect that and sanitary landfills not designed for hazardous waste to occupational hazards and environmental threats. We do not insist that these small quantities receive the full manifest, but we do believe they should require notice to us.

The fourth area is that the permitting process is being unnecessarily and dangerously stretched out. RCRA was enacted 5½ years ago. Of the 10,500 facilities which treat, store and dispose of hazardous wastes only 2 have final RCRA permits today.

We urge EPA to call up all part B applications as soon as final regulations are in place. Once the applications are called, those interim status facilities which cannot meet stringent standards will have to close down.

Senator CHAFEE. OK. Mr. Hanneman, your time is up. Why don't you summarize the last part.

Mr. HANNEMAN. Fifth, EPA needs to be more sensitive to developing the interface with the States, and we would support continuing Federal grants to the States to keep them involved in the process.

Sixth, EPA should concentrate its resources more effectively on a strong enforcement program. Now that we have standards in place, we think we ought to go ahead and enforce.

I think it is important to note our members were telling us 2 months ago we are getting enforcement. Now we are being told we are not getting enforcement at all. It has evaporated, contrary to the earlier testimony today. We urge the members of the committee to take notice of this.

Also, we believe EPA should become involved in looking out for the interest of its programs in other agencies, such as the continued eligibility of industrial development bonds which would finance hazardous waste facilities.

And last, to support the important public relations aspect of the EPA so that it can retain public confidence and credibility in going ahead, because without it the Agency's opinions will not enjoy public confidence.

Senator CHAFEE. Thank you for a good statement, Mr. Hanneman. Well done.

Mr. Mott, you may proceed.

STATEMENT OF RANDY M. MOTT

Mr. MOTT. Thank you, Mr. Chairman. I am standing in today for Marvin Durning, who normally fills this function.

My name is Randy Mott. I am an attorney representing the Hazardous Waste Treatment Council. The council is a trade association of companies engaged in the incineration, detoxification, neutralization, and treatment of hazardous waste. It was recently formed to promote the safe and environmentally sound treatment of hazardous waste.

This subcommittee's consideration of the problem of siting new treatment facilities and development of new facilities is one of the most important issues presented under RCRA.

The construction and utilization of facilities employing more effective technological alternatives to the hazardous waste disposal problem has lagged behind both environmental needs and potential feasibility.

Failure to employ superior waste treatment technology has left the United States with a greater reliance on landfills for hazardous waste disposal than other industrialized nations—a reliance which flies in the face of the consensus that no truly secure landfill exists and that many persistent toxic wastes presently being landfilled will outlive their temporary earthen homes by thousands of years.

This shift toward superior treatment technology is presently being thwarted by several factors which make siting difficulties even more intractable than they otherwise would be. I would like to discuss two.

First, insufficient financial incentives exist for investment in improved equipment and facilities. I might add as an aside, Mr. Chairman, the chemical industry's development of superior methods discussed earlier today is a result of their purchasing on the open market from equipment vendors the hardware to do so, and that those vendors, some of which are members of the council, sell that equipment to anyone to buy. The problem has been not enough people want to make the investment. Treatment technology cannot compete with the cost of burial of hazardous wastes as long as the cost of disposal does not incorporate the true cost to society.

In addition, hazardous waste treatment technology must also compete with completely unregulated practices, such as the burning of wastes in boilers. The unregulated burning of toxic wastes is projected to grow significantly through 1985 as environmental controls on other disposal and treatment options make it even more attractive economically. In the meantime, we may, in EPA's own words, be incurring "unacceptable levels of risk" from this unregulated use of hazardous waste for "heat recovery." This frustration of competitive economic incentives which results from a lack of regulation promises to prolong our society's reliance on the dangerous disposal practices of the past.

Second, inconsistent and uncertain regulations and enforcement have heightened public apprehension of new siting proposals.

In a March 1982 EPA public hearing, the League of Women Voters stated that to say today, for example, because EPA certifies a site is complying with their regulation to reassure citizens would only invite ridicule, given the public's concerns of what is happening. There is a kernal of truth to that.

Lacking the financial incentives to risk substantial investments, most companies continue to seek the lowest cost option legally available to them. Existing capacity to treat and destroy hazardous wastes remains underutilized, and new capacity becomes increasingly difficult to justify to shareholders, investors and lenders.

Dr. Samuel Epstein's forthcoming book, "Hazardous Waste in America," cogently summarizes their point:

> The greatest disincentive to the improvement of currently available disposal techniques, and to the development and application of resource recovery and a wide range of prototype techniques, is the ease and economy of disposal of hazardous wastes in "secure" landfills. The creation of economic disincentives to "secure" landfill disposal . . . to other forms of disposal and resource recovery are critically needed to reverse this situation.

The closing of RCRA loopholes, together with measures that restrict landfilling of some particularly toxic and dangerous hazardous wastes and that force the true costs of landfilling to be borne by the landfill user not society, will begin to create the incentives necessary for the development of a viable treatment industry. These same measures would do much to moot siting problems by reducing public apprehension and heightening the incentives to site new facilities.

I might add, Mr. Chairman, that on the case of regulation of boilers, the State of Rhode Island Department of Environmental Management has always considered a boiler the same as an incinerator. Your State's hazardous waste management regs define burning to encompass these boilers. According to the staff of the department of environmental management, three entities are burning today—one university and two industrial. They are monitored. Our point is they don't know who else is doing it in Rhode Island. They don't have enough people to go out and inspect. We heard similar comments in States like New York and New Jersey. The thrust of the recent legal demand on EPA is simply to require that EPA boilers be brought into the information loop. If that stigmatizes them that is unfortunate. But I don't think the present situation has been stigmatizing. They are regulated and there is some assurance the public is protected.

Senator CHAFEE. Thank you.

Ms. Hall, you may proceed.

STATEMENT OF KHRISTINE L. HALL

Ms. HALL. The environmental defense fund has been a a major participant in all major RCRA rulemaking since RCRA was passed in 1976. EDF has witnessed a startling reversal away from the attitude of protection of public health and implementation of RCRA to an emphasis being put on regulatory relief. The result has been no forward movement in regulations under RCRA for the last year, and, in fact, we have taken several giant steps backward.

I would like to catalog some of those steps backward and lack of movement.

Recently EPA deferred three reporting requirements. One was for an annual report due March 1. This is the only source of information concerning who generates waste, and where it goes, available to the public. Second, they deferred ground water assessment outlines. This is an important requirement so when ground water is damaged by a site the facility can move fast to correct it. Third, they deferred quarterly ground water monitoring requirements. Interestingly, this deferral took place at the same time EPA announced 55 percent of the facilities inspected were not in compliance with the ground water monitoring requirements. These deferrals were announced in the Federal Register with no notice and opportunity for public comment.

Second, there have been significant delays in the landfill regs. Four years ago last week, EPA under RCRA should have had the regulations in effect. Instead, we have seen repeated delays that started in the Carter administration and continue to this day. To this date, even though they are under court order, EPA has not told the court when they are going to get those regulations out.

Third, last summer EPA abruptly in effect suspended regulations governing hazardous waste incinerators and waste surface storage impoundments. They then formally proposed to suspend the regulations in October. To date, we have no concrete idea what they are going to do with the regulations governing 850 incinerators and 1,500 surface storage impoundments. Again, no notice was given or opportunity for public comment before the action was taken.

Fourth, we lost a complete year on liability insurance requirements for these facilities. These are very, very important requirements, and for spurious reasons EPA held them in abeyance for a year.

Fifth, not too long ago EPA and industry signed a settlement agreement in litigation that outlines how EPA will treat permitting requirements for hazardous waste facilities. One of the major concessions EPA made is a 180-degree reversal of attitude. They are allowing interim status facilities to expand up to 50 percent without having to meet final permitting regulations. Thus, if a facility has two incinerators, the facility would be able to build a third incinerator without having to meet any EPA requirements. Another part of the settlement agreement allows a source to construct a facility without getting EPA review. The permit requirement attaches only at the time of operation, not construction. EPA, in effect, will not have any say where these sources are located. Last, EPA has agreed with industry to allow the permit they write to be in effect for the life of the facility.

Sixth, EPA suspended the ban on liquids in landfills. To its credit, EPA a month later acknowledged its mistake and reinstated the requirement banning liquids in landfills. But this was only after large public furor erupted.

Seventh, you have heard several people mention lack of forward movement on what were loopholes in the regulations. EPA is currently doing nothing to move ahead quickly. This includes loopholes on boilers, small generators, domestic sewage, and listing of hazardous wastes. The list of regulations promulgated in 1980 was limited. Instead of moving forward and putting in a more meaningful list of hazardous wastes, the EPA has been busy delisting several compounds.

You have talked about to a certain extent already the lack of proceeding in permitting activities and enforcement. EPA has set an ambitious goal of writing a hundred permits. As far as I can tell from looking at the statistics, they are far behind in that schedule. We think EPA can and should get those permits written before an 8- to 10-year period. The enforcement record is similarly dismal, with no enforcement cases being filed under RCRA since last June.

Where do we go from here?

Senator **Chafee**. Let's summarize where we go from here because we are out of time. Go ahead and summarize the last part.

Ms. **Hall**. EPA must renew its commitment to RCRA. The statute is basically sound. And they must review all actions they have in progress that are in the name of reform.

Second, they must get the landfill regs out, and quickly, and they must be able to protect public health and the environment. Specifically, they must have provision for hydrogeological conditions and adequate ground water monitoring. We have been unable to see drafts of what is happening, but we hear every draft of the landfill regs gets weaker.

Third, they must go beyond landfills and closely examine the advisability of continuing to rely on landfills. All landfills leak. I have appended to the back of my testimony some of the science that supports that proposition. Society as a whole should be moving away from landfills. California and New York have these initiatives in progress. We think EPA should take a look at those initiatives. EPA must encourage alternatives. They really have no program to do that.

Next, they must get on with an adequate permitting process. They must ask for the resources to do it.

And last, they have gone through a rash of actions where they have effectively locked the public out. They take the action, announce it, and wait to see what the reaction is. The rash of rulemaking without the opportunity for public comment is counterproductive and cannot continue.

Thank you.

Senator **Chafee**. That is a powerful statement and very well documented, and we are delighted to have that, Ms. Hall.

Our final witness is Ms. Jane Bloom from NRDC.

STATEMENT OF JANE BLOOM

Ms. **Bloom**. NRDC welcomes this opportunity to present our views on EPA's recent actions implementing RCRA and overlapping provisions of the Safe Drinking Water Act, and particularly with regard to EPA's responsibility to protect ground water.

One of the best documented, major public health problems created by improper hazardous waste disposal practices has been the contamination of ground water, which supplies 50 percent of the Nation's drinking water. Concern has increased as new and more comprehensive monitoring data indicate that the contamination of ground water sources is a more serious and widespread problem that was originally thought. In a recent Federal Register notice, EPA announced that organic chemicals, many of which are believed to cause cancer and other life-threatening diseases in humans, have been detected in 45 percent of the public water systems that draw on ground water and serve over 10,000 people. The presence of these chemicals in underground sources of drinking water is generally believed to be the result of improper disposal of hazardous waste. The EPA data also indicate that these chemicals have been detected in extraordinarily high concentrations, which exceed by several orders of magnitude those found in surface drinking water sources.

As EPA acknowledges, ground water is often prohibitively expensive or technologically impossible to clean up. Thus, this new evidence of extensive infiltration of drinking water by hazardous substances indicates the desperate need for even more stringent controls on hazardous waste practices that endanger drinking water than are currently in place.

To address this serious problem, RCRA required EPA to implement regulations that protect that endangered underground source of drinking water. It further required EPA to implement RCRA with the appropriate provisions of the Safe Drinking Water Act, which is designed to insure the drinking water supplies. Rather than using these two statutes to comprehensively regulate waste disposal, EPA has implemented these statutes expressly to authorize practices that are known to result in ground water contamination.

I would like to illustrate this point by describing EPA actions in two areas, underground injection and landfilling of hazardous waste, and my testimony will focus on underground injection because it is something that hasn't been mentioned.

Underground injection of hazardous waste into wells and streams directly into aquifers is a relatively inexpensive and potentially widespread disposal practice that can pose serious threats to underground sources of drinking water. Consequently, the underground injection control program of the Safe Drinking Water Act requires EPA to prohibit these practices which are widespread in certain States if they endanger the potential underground sources of drinking water. Injection of hazardous waste into drinking water aquifers or shallow wells above the aquifers obviously pose grave threats to aquifers. Consequently EPA orginally proposed to ban these practices entirely. However, EPA retreated from its position largely in response to industry pressure.

EPA's current UIC regulations expressly authorize injection of hazardous waste directly into underground sources of drinking water. This practice is allowed to continue until such time as State UIC programs are approved by EPA, a process that is only now getting underway. In addition, injection into existing shallow wells above drinking water aquifers, a practice EPA deemed inherently dangerous, is authorized until such time as EPA promulgates permitting requirements for class IV hazardous waste injection wells. However, promulgation of these permitting requirements has been reserved by EPA since 1980, and no date has been set for their issuance. EPA's explanation for this delay is that these requirements must be coordinated with the final landfill regulations, which are now long overdue, under RCRA. By reserving these permits under the Safe Drinking Water Act and delaying issue of final landfill permits, EPA has created a catch-22 situation, in which there are presently no substantive requirements applicable to underground injection of hazardous waste that endangers drinking water.

The only controls imposed are those under the interim status program under RCRA, which the GAO report to Congress says are largely administrative and provide no significant protection against the serious dangers posed by hazardous waste. Consequently, EPA is not currently providing protection of ground water under either RCRA or the Safe Drinking Water Act.

Concerning landfills——

Senator **Chafee**. Your time is up, Ms. Bloom. I will give you a little more time to summarize.

Ms. **Bloom**. As other witnesses have testified, this is a very dangerous practice and it poses especially great risks to ground water. EPA's decision to propose to amend its regulations to authorize 25 percent of the volume of landfills to be filled with liquid containerized wastes we feel is a very grave mistake and seriously undercuts any credibility in their commitment to prevent ground water contamination. We feel the statutory requirements of RCRA are very clear, that EPA must maintain a ban on practices it finds inflict harm to human health and the environment. EPA's implementation, and not defects in RCRA, will be to blame if EPA decides to allow this dangerous disposal practice to continue.

We feel similar indications of proper commitment to prevent contamination of ground water by hazardous wastes are their failure to enforce compliance with monitoring requirements in effect for landfills during interim status and its recent weakening of the ground water reporting requirements designed to detect leaks from hazardous waste facilities, and we address ourselves to these concerns in our written testimony.

Senator **Chafee**. That is helpful. I think the points that are made here regarding the landfill are so valid. I think it was Mr. Hanneman or Mr. Mott who pointed out true costs are brought into consideration. If there ever was an area where an ounce of prevention is worth a pound of cure, it is in this ground water and landfills business. We have heard of occassions where several thousand barrels are dumped and buried. I am familiar with one in my State, and the cost of cleaning this up is incredible. So those costs and the effect on future generations clearly should be borne in mind when we make a cost comparison of what it would take to build a unit.

We thank you all very much for testifying here today, and we will bear your comments in mind as we proceed to mark up the legislation.

Mr. Donald Carruth of the American Eagle Foundation is submitting a statement in support of sea incineration of chemical wastes, the concept of destruction of hazardous and toxic wastes by incinerator ships. We will make that statement a part of the record. (See p. 225.)

Senator **Chafee**. The Container Corp. of America is submitting a statement. (See p. 246.) So we will keep the record open at least for 10 days for statements.

Thank you all very much.

[Whereupon, at 1:10 p.m., the subcommittee recessed, to reconvene subject to call of the Chair.]

[Statements submitted for the record follow:]

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TESTIMONY OF CAROL C. AMICK, MASSACHUSETTS STATE SENATOR BEFORE THE SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION OF THE ENVIRONMENT AND PUBLIC WORKS COMMITTEE OF THE UNITED STATES SENATE, APRIL 26, 1982

Mr. Chairman, Members of the Subcommittee, My name is Carol Amick and I am a member of the Massachusetts State Senate where I serve as Senate Chairman of the Joint Committee on Natural Resources and Agriculture as well as the Special Commission on the Adequacy of Water Supply. I am pleased to testify today on behalf of both the Massachusetts State Senate and the National Conference of State Legislatures where I serve as a member of the Natural Resources and Environment Committee.

As the official representative of the Nation's 7500 state lawmakers, NCSL strives to provide state legislatures with a strong voice in the federal decision-making process. NCSL has long taken an active interest in federal hazardous waste management initiatives including the passage and implementation of both RCRA and Superfund.

I would like to thank you for providing me and NCSL with another opportunity to speak to the critical need for a strong federal/state partnership in hazardous waste management. My purpose today is to address an effort which has traditionally not been considered an integral part of the Resource Conservation and Recovery program; that being the siting of new hazardous waste facilities. At the outset I want to point out that NCSL and the Massachusetts Legislature strongly believe that the actual siting of hazardous waste facilities is now, and should remain, the prime responsibility of the states. However, I hope to demonstrate today that while states have put in place new procedures which will allow technically sound and publicly acceptable siting decisions to be made, the states' successes in siting new facilities will be in a large part dependent on the extent to which the federal government aggressively implements the provisions of RCRA and Superfund.

Let me begin by assuring the subcommittee that state legislatures are keenly aware of the growing need for safe treatment, storage and disposal facilities. Spurred by enactment of the Resource Conservation and Recovery Act, and the growing evidence of public health threats stemming from our country's legacy of improper disposal practices, state legislatures in the late 70's began deliberations to frame comprehensive hazardous waste management programs.

For example, in 1979 the Massachusetts legislature passed a hazardous waste management law which allows us to gain interim authorization under the Federal RCRA program. At the same time it became imminently clear to us that if our program were to be aggressively implemented, additional disposal capacity would be needed. Subsequent to the passage of our hazardous waste management legislation, we mandated that a legislative commission be formed to assess our future disposal needs and to draft legislation to frame a new procedure to site the necessary facilities. After a year of intensive study and deliberation by the Commission composed of industry, state agency, citizen and legislative representatives -- including myself, the Massachusetts Hazardous Waste Facility Siting Act of 1980 became law.

Mr. Chairman, our Massachusetts law is unique in the country, because it retains our strong New England tradition of home rule by giving the people of the proposed host community the final decision-making power to accept, or reject, a facility. The local community cannot, however, turn down a facility purely for emotional reasons. Instead, our siting law requires that the local community conduct a detailed, technical analysis of the proposal, including an evaluation of the new facility in comparison to existing industrial activities in the area. If the community then rejects the proposal, the developer can appeal the community's action through the courts.

Those of us who wrote this law believe that we will site environmentally-sound facilities once the local community is educated to understand that the technology exists for safe waste disposal. The first reaction to a proposal to site a facility is expected to be strong opposition from the local community. But in a few cases, after the local officials and residents become better educated about the problem, and to understand that industry in their communities are already generating hazardous wastes , they begin to realize that hazardous waste facilities using the latest disposal technology to neutralize, stabilize or incinerate the wastes are a far better solution than allowing the illegal dumping or the landfill disposal or untreated wastes. And then, they work positively in the siting process.

In short, the Massachusetts siting law establishes an incentive-based, site specific negotiations process between the developer and the local assessment committees representing proposed host communities. The process is overseen by a 21-member State Site Safety Council composed of representatives of state agencies, professional organizations and the public. The Council is charged with the important task of determining which projects seem technically and environmentally sound, to be passed onto the host community for further, more detailed review. The siting Council also assesses the socio/economic impacts of a proposed project, awards technical assistance grants to local communities, determines compensation from developers to abutting communities, and assists both the community and the developer in the siting negotiations.

While at first glance this process may appear necessarily cumbersome and time-consuming, I want to assure the committee that we have designed this system to be responsive to the needs of the citizens and business community in Massachusetts. We are firmly convinced that it is a workable and desirable process for the siting of technically sound and publicly acceptable hazardous waste facilities in Massachusetts. Regulations under this statute are currently in proposed form and we expect them to become effective in late May.

I wish to point out that our legislature's focus on hazardous waste facility siting is not unusual to the rest of the country. The attached compendium, prepared by the National Conference of State Legislatures in cooperation with the National Governors' Association, the National Solid Waste Management Association and the U.S. EPA, contains abstracts of twenty-five states' siting laws enacted over the past few years. While the procedures for permitting new hazardous waste facilities may vary from state to state, the objectives remain the same. Each state has developed procedures to assure that sites are constructed in a technically-sound manner and with substantial imput from the affected public. In many cases, statutes mandate an assessment of the amount of waste being generated, a listing of criteria which a proposed site must meet, and in most instances, statutes provide for the creation of a siting board composed of scientists, state,and local officials, to advise the states in their permitting decisions.

I think that it is important to point out, that to date, 25 of the states with the greatest need for disposal or treatment capacity have recognized the shortcomings of their past permit systems, and have created new and innovative approaches to siting. Clearly, we as states have recognized that past approaches which gave state agencies broad authority to permit or license facilities following public hearings, are no longer adequate. On the heels of Love Canal and the Valley of the Drums, citizens in increasing numbers are now demanding a more meaningful role in siting decisions.

An accounting of those considerations which have become the heart of state siting procedures is contained in a report prepared by Centaur Associates, Inc., for the EPA. Centaur concluded that citizens must be assured of the following, if there is to be local acceptance of a facility:

- complete information is available about site operations and proposed waste streams;
- public and local officials are to be substantially involved in the siting process;
- facility operators are persons or an organization of lasting integrity;
- risks of catastrophic or insidious dangers are slight;
- significant benefits to local areas are present to offset risks;
- the site does not conflict with other enterprises or existing activities nor is the site better suited to other uses;
- government has sufficient expertise and resources to judge the merits of the site design and operation;
- sufficient government regulations exist to guarantee safe operations and to ensure proper maintenance after closure; and
- technical merits of the selected site/facility are unquestioned .

Let me now turn to an accounting of where state siting efforts stand to date. The attached chart prepared by the National Conference of State Legislatures shows that of the 25 states which have enacted new siting statutes, 17 now have regulations in effect. New sites have been selected in Michigan, Oregon, Arizona and Alabama. Site applications are pending in eight states. And siting statutes are under current consideration by legislatures in Rhode Island and Wisconsin.

Now that I have described the role and actions of state governments, I would like to address what I foresee to be the appropriate federal role in hazardous waste facility siting, and why, without a strong federal presence, state efforts to site new facilities may be severely hampered.

1. The federal government must assist states in assessing the amount of waste being generated.

Of the 25 states contacted by NCSL, at least half are presently without an accurate accounting of the amount of waste being generated within their borders. While states are devoting their dwindling staff and financial resources to conducting such assessments, U.S. EPA has actually taken actions which will impede the states' work. For example, EPA has recently chosen not to require hazardous waste generators to submit annuals reports. Instead, EPA has indicated that it will conduct a statistical sampling of about 10 percent of generators nationwide. While EPA will use this data to extrapolate a national total volume, states will have little or no use for such information. On the other hand, state-by-state generation figures which could be derived from the total universe of generators, would provide major assistance to states.

In addition to supporting the annual report, we strongly support the need for a uniform manifest for the "cradle to grave" tracking of hazardous waste. A copy of a document identifying the material characteristics and quantity travels with the waste from the time it leaves the place of generation until it reaches a treatment, storage or disposal facility. Congress clearly recognized that unless wastes are tracked by such a system, wastes will "disappear" on route -- along roadsides, in swamps and woods, posing a serious threat to public health and the environment. Such a manifest could provide states with an accurate accounting of the amount of waste being shipped "off site" and thus enable states to better assess the need for additional facilities. Instead, recent regulations and proposal by the EPA taken together, make the manifest system ineffective and incapable of tracking the flow of hazardous waste, and will make if virtually impossible for states to gather waste generation information. Let me explain.

- Under regulations promulgated May 19, 1980, EPA receives a copy of the manifest or receives notice of a shipment only when the waste does not reach the proper facility within 45 days. With this "exception reporting" system, EPA has no means of independently verifying that a firm's shipment reaches a legal and suitable disposal facility. Firms are supposed to report themselves when one of their shipments goes awry, but it would be difficult to identify those that didn't. The regulations also require firms to retain manifest copies for three years. In this way, EPA says its staff can verify handling procedures when the conduct on-site inspections.
- Combined with the exception-reporting manifest system,EPA's decision not to require the submission of annual reports means that EPA is not collecting, and may never collect, information on the amount and type of hazardous waste being generated, treated and stored, where the waste goes, and how it is disposed. How can we have a credible cradle to grave tracking system without this basic data?
- In a March 4, 1982 proposal, the EPA presented a draft manifest for mandatory use nationwide. Under this proposal, the manifest form requires that the waste be categorized according to a U.S. Department of Transportation shipping number. This is a totally different identification system from the one required in all other EPA documents: EPA's annual reports and exception reports use the EPA numbering system because it is more descriptive of waste types and characteristics. Because the DOT system is tailored to hazardous materials and not to hazardous wastes, use of the DOT shipping number on the manifest form prevents a state from cross-checking information submitted by the shipper. Again, states would be greatly assisted by an EPA requirement that both the DOT shipping number and the EPA waste number be required on the manifest.

2. State solid and hazardous waste staffs are being stretched thin by the curtailment of federal grant funds and by EPA administrative restrictions on the use of the remaining funds.

Under RCRA, states were encouraged to develop both state solid and hazardous waste management plans. Federal grant assistance was provided to the states for these purposes. However, today, not only are states faced with the total curtailment of solid waste funds and a reduced level of funding for hazardous waste management, but now administrative decisions made by EPA prohibit the use of the remaining hazardous waste grants for solid waste management and for state siting efforts. Coupled with the decrease in federal assistance, is the increase of states' responsibilities relative to the federal Superfund program. We are being asked to submit to EPA listings of our priority hazardous waste sites which may pose a threat to public health. In order to do so, we must conduct field investigations and laboratory sampling. However, EPA has determined that this work is not eligible for reimbursement under the federal Superfund.

The point I wish to make, is that simply put, state staffing and financial capabilities are presently stretched to their limit, in a time when numerous states are showing deficits, and in a time when increased responsibilities are being returned to us by the federal government. Not only will these cutbacks have an adverse effect on our state siting programs, but on our ability to implement and aggressively enforce in their entirely our hazardous waste management programs.

3. Lack of a strong and aggressive effort by the EPA to implement RCRA has stalled state efforts.

Let me give you an example from my Massachusetts experience. Through our state siting law which I earlier described to you, a corporation from California proposed to build a large treatment facility in an area adjacent to the Mass. Turnpike about 70 miles west of Boston. The developer of this facility --

which was to have incorporated the latest technology for the safe treatment of both organic and inorganic hazardous wastes, encountered public opposition from the proposed host and abutting communities when they first learned about the proposal. This is to be expected, as I also stated earlier, until the community has had a chance to review the proposed facility and become more knowledgable about the hazardous waste problem.

But just as the process outlined in the siting law was entering its early stages, the EPA announced that it was suspending its ban on the burial of toxic liquids in landfill disposal areas. EPA's proposed action was a step backward in the national hazardous waste management program. EPA had not consulted the states (which they are required to do under RCRA); EPA had not consulted the public.

Subsequently, after a public hearing, EPA brought the liquid in landfills prohibition back into effect, but announced it would amend that ban to allow this disposal if certain liquids were removed or solidified.

As a result of EPA's actions on this issue, the California corporation proposing to build a multi-million dollar treatment facility announced that it would put its Massachusetts siting plans "on hold," since the liquid in landfill decision would significantly reduce the amount of hazardous waste legally requiring their sophistocated treatment process. Why should generators bring their liquid wastes to the facility, when they could more inexpensively dump them in landfills?

And that statement is sad, but true. The EPA's actions on the liquid in landfills regulation dealt a severe blow to the Massachusetts siting process in this instance. While I am not stating that I supported the California corporation's specific proposal -- because that decision is left to the host community to make after careful, detailed scrutiny -- I do believe that other facility developers as well as the California corporation will take the EPA decision on liquids in landfills as an indication that the federal government is not interested in the best technology to treat and dispose of hazardous waste. And this attitude will severely cripple states' efforts to site facilities across the nation.

In my opinion, without a strong federal hazardous waste management program, states will experience serious problems in attempting to site new hazardous waste facilities, for the federal program serves in every instance as the underpinning for state programs. While I am pleased to say that Massachusetts has elected to implement a program more stringent than the federal program, other states have not. And as my colleague, Senator Anderson from Colorado will point out, the success and strength of many state programs is tied directly by state statute to the nature of the federal program. In order to locate new hazardous waste facilities, we must, as I have already pointed out, be able to assure our citizens that sites will be developed according to strict technical standards, that site operation will be closely monitored and that site owner/operators will be financially responsible in the event of an emergency.

Specifically in the case of Iowa, Maryland, Utah and Illinois, promulgation of regulations under their siting laws are dependent on final promulgation of federal regulations.

I strongly urge this committee to do all in your power to prevent EPA administrative decisions and regulations I have mentioned today from taking effect, because they are contrary to Congressional intent. I believe the Congress adopted RCRA because it wanted:

- to put into place a strong regulatory system;
- to establish a speedy resolution of uncontrolled site problems;
- and to provide for the development of facilities that can safely treat

and dispose of hazardous waste.

EPA's implementation of RCRA so far is leading the federal government away from these goals and making it impossible for the states to fulfill their responsibilities under the law. I urge this subcommittee to push for the aggressive reauthorization of RCRA as well as any amendments which will bring the EPA implementation back on the right track to follow Congressional intent. We continue to have faith that Congress will not abandon the environmental needs and accomplishments of the last decade.

In conclusion, I would like to thank the subcommittee for the opportunity to speak to the importance of the Resource Conservation and Recovery Act. While recognizing the complexities of this issue, we want to reiterate the importance of a strong federal/state partnership in all aspects of hazardous waste management. Clearly, we are not asking the federal government to solve all the problems confronting the states, but rather for the federal government to agree to assuming a serious and longstanding commitment to assisting and supporting state efforts.

That concludes my remarks, Mr. Chairman, and I would be happy to answer any questions you might have.

STATUS OF STATE SITING ACTIONS

Prepared by the National Conference of State Legislatures

April 1982

STATES WITH SITING STATUTES	SITING REGULATIONS		SITES ESTAB. UNDER STATUTE	SITE APPLICATION UNDER REVIEW		COMMENTS
	Prop.	Effective		Yes	No	
1. Arizona (2/81)		X	X			Rainbow Valley Site has been selected as the only statewide facility needed. State is negotiating with BLm over land purchase. Additional on site facilities will not be discouraged. Bids on the Rainbow Valley Site will take place in June. Sixty developers are expected to offer bids.
2. Connecticut (7/81)	X			X		Siting regulations have been approved by the AG and are awaiting approval by Legislative Review Committee. University of Connecticut will establish a facility on campus.
3. Florida (10/80)	X				X	Siting rules will be proposed shortly and if adopted will become effective July 1982.
4. Georgia (3/81)		X		X		Application for a land disposal site is pending.
5. Illinois (11/81)		X		X		Two or three applications are pending
6. Indiana (4/81)	X			X		Regulations are in first draft. Applications for treatment and storage facilities are being processed. No land disposal applications are pending

STATES WITH SITING STATUTES	SITING REGULATIONS		SITES ESTAB. UNDER STATUTE	SITE APPLICATION UNDER REVIEW		COMMENTS
	Prop.	Effective		Yes	No	
7. Iowa (7/81)					X	Few regulations have been drafted because siting legislation requires that siting regulations and site permitting requirements must be approved together. No action expected until federal EPA regulations become final.
8. Kansas (1981)		X			X	No applications for sites are pending. State expects an application for an expansion of an existing site as a part of the proposed site cleanup of Furley Site.
9. Kentucky (7/80)	X				X	No site applications in process. SB 279 was signed by the Governors on 4/2/82 and authorizes one state owned commercial/regional facility utilizeing high technology design. No site applications are pending.
10. Maine (1981)	X				X	no site applications have been submitted.
11. Maryland (7/80)		X	X	X		Browning Ferris has an application which is pending for expansion of an existing facility. An additional state site has been selected and is in the early development stage. 50% expansion rule at EPA is inhibiting process; uncertainty of EPA regulations inhibits completion of applications.

STATES WITH SITING STATUTES	SITING REGULATIONS		SITES ESTAB. UNDER STATUTE	SITE APPLICATION UNDER REVIEW		COMMENTS
	Prop.	Effective		Yes	No	
12. Massachusetts (7/80)		X		X		Siting regulations should be approved by May 1, 1982. Three site applications are pending.
13. Michigan (1/80)		X	X		X	A Dow Chemical on site facility expansion has been approved.
14. Minnesota (4/80)		X			X	State Waste Management Board has selected 16 landfill sites which will be narrowed to 6 by June 1982.
15. Nebraska (4/80)		X			X	none
16. New Hampshire (8/81)		X		X		Application for waste management facilitie are under review.
17. New Jersey (9/81)					X	Siting commission just organized. Law requires minimum of two years to site facility
18. New York (9/78)		X				Application for state-owned facility at Sterling withdrawn due to citizen opposition.
19. North Carolina (6/81)		X				none
20. Ohio (10/80)		X				none
21. Oregon (10/79)		X	X		X	Facility established prior to adoption of siting statute. No new facility applications are pending.

STATES WITH SITING STATUTES	SITING REGULATIONS		SITES ESTAB. UNDER STATUTE	SITE APPLICATION UNDER REVIEW		COMMENTS
	Prop.	Effective		Yes	No	
22. Pennsylvania (1980)		X			X	Hazardous Waste Facilities Plan is under development. Citing criteria portion may be approved in late April.
23. Tennessee (7/80)		X			X	none
24. Utah (1981)					X	State is awaiting final EPA regulations before State regulations are proposed.
25. Washington (6/76)		X			X	Law calls for state owned site and land has been purchased. Governor does not feel new site is needed with accessibilit of Oregon Site.

STATEMENT OF JOEL S. HIRSCHHORN
PROJECT DIRECTOR, OFFICE OF TECHNOLOGY ASSESSMENT
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

April 26, 1982

Mr. Chairman and Senators, my statement responds to your request for our preliminary findings from our ongoing assessment of nonnuclear industrial hazardous waste, particularly as they relate to the problem of siting hazardous waste facilities. I am accompanied today by Dr. Suellen Pirages, senior analyst on the assessment. I will first review the basis for public concern about hazardous waste facilities. Then I will describe an approach to the entire system of regulating and managing hazardous waste that could help to reduce the siting problem if implemented in a manner that restores public trust.

CITIZEN OPPOSITION TO SITING

A major problem in hazardous waste management is the continuing opposition by the public to siting of hazardous waste treatment or disposal facilities. Citizen opposition to facility siting often has been identified as a major cause of a predicted shortfall for appropriate disposal and treatment facilities. A preliminary finding of the OTA study is that public opposition results from a lack of confidence in the ability and intent of Federal and State authorities to protect human health and the environment. OTA finds that there are seven specific areas where EPA activities have provided sufficient cause for citizen concern:

1. Although EPA has developed three different sets of regulations governing land disposal facilities, none have been finalized. An underlying theme in the latest set of proposed EPA regulations for landfills appears to permit contamination by certain compounds where human use of the land or water may not be readily apparent.
2. Current requirements for monitoring activities within any type of facility are inadequate and EPA has indicated that it is considering reducing requirements even more. Without stringent requirements for monitoring facilities during operation and post-closure, if leakage of contaminants to surrounding land and water sources occurs, it may not be detected until catastrophic levels of pollution have been reached.
3. EPA has continued to encourage land disposal as a predominate method of hazardous waste management, even though recent studies have shown that relatively new landfills, only five years old, have not contained hazardous wastes adequately. The Agency has done little to formulate incentives for developing or commericializing alternative options, of which there are many.
4. There is increasing public awareness of the many exclusions in current regulatory coverage of hazardous wastes, including wastes from exempted small generators that currently go to sanitary landfills, and wastes being burned in ordinary industrial boilers without safeguards against excessive emissions of hazardous components.
5. EPA has been charged with reducing its efforts in enforcement of even the limited regulations that are in interim status. In FY 82, 129 notices of violations were sent out by the Agency and only 29 actual

cases were under development. In contrast, over 400 notices of violations were sent out in FY 81, and an additional 115 facilities were cited under Superfund as threatening either health or the environment.

6. EPA has done little to encourage reduction of waste generation either through recycle/recovery technologies or through modifications of manufacturing processes; such modifications could reduce the amount of waste generated per unit measure of commercial product.
7. EPA has not funded RCRA mandated State inventory studies of waste sites and other programs sufficiently, and the trend is worsening.

The American public today is asked to host additional facilities near their homes and work places; yet they are confronted with the spectre of hazardous waste problems such as Love Canal, with continuing reports about budget and staffing cuts for the EPA, and with an awareness of the hesitation or inability on the part of their State to assume responsibility for program activities. Compounding this problem, the public is asked to agree to these additional and necessary facilities in the face of potential regulatory reforms that could relax the present limited performance and monitoring standards.

In sum, the public perceives that effective management of hazardous waste is not receiving priority attention by EPA. As a result, fears are increased and the resolve of citizens not to allow a waste management facility "in their backyard" is strengthened.

EFFECTIVE WASTE MANAGEMENT PROGRAM AS A POSSIBLE SOLUTION

OTA believes that there are ways to counter the aforementioned trends and to reduce their impacts. If these siting problems are to be addressed, and perhaps reduced, it is necessary to have a national hazardous waste management program that is comprehensive, readily understood by all (i.e., the regulated community and concerned citizens), and above all which is implemented and enforced in a manner that restores public trust.

If the mandate of RCRA is to be met, certain key management issues should be addressed. First, it must be recognized that industrial waste streams pose varying degrees of potential harm to human health and the environment. Second, application of both existing and newly developed technologies can reduce potential hazards of a given waste stream. Third, extensive monitoring efforts are needed to verify the effectiveness of any technology. Finally, carefully designed siting requirements and criteria are required to reduce the risks of accidental releases.

As part of the ongoing study of nonnuclear industrial hazardous waste management, OTA is developing a basis for defining a management system that would address these issues and which EPA and Congress may wish to examine as an alternative to the current approach. The outline for the system discussed today must be considered only preliminary. Reasons for describing this preliminary work are twofold: 1) it is necessary to indicate to members of this Committee that there are alternatives to the ad hoc management approach used by EPA; and 2) development of a well-defined system based on degree of hazard and with specified criteria for siting and monitoring could restore credibility in the Federal hazardous waste management process, and thus have a positive impact on current siting problems.

In the outline of the COMPREHENSIVE HAZARD ASSESSMENT-REDUCTION MANAGEMENT SYSTEM, the key role of both Federal and State governments is to set criteria for distinguishing different degrees of hazard among industrial waste, set performance standards for all technologies, and develop criteria for monitoring and siting. A chart illustrating this system is appended to my statement. This framework for regulating and managing hazardous waste is based on the recognized need to first describe and characterize industrial waste streams and then to couple that information with a knowledge of applicable management approaches (including technologies, types and levels of monitoring, and site requirements).

There are two major points we address. First, the type of constituents identified within a particular waste stream limits the choice of management or treatment technologies. Second, the stringency of control or level of regulatory standards should relate to a potential hazard that a particular waste stream poses to human health or the environment.

The proposed framework integrates several important elements of waste management:

o chemical/physical waste stream characteristics that determine waste treatability;

o waste stream characteristics that effect the degree of hazard posed to human health and the environment;

o performance standards related to the effectiveness of a technology to reduce potential hazards;

o alternative technological options for managing hazardous waste, with emphasis on distinguishing between those methods that merely contain waste versus those that detoxify; and

- environmental criteria for siting and monitoring efforts.

These elements are combined such that uniform criteria are applied by which the hazard potential of any waste and any facility can be judged. The current system proposed by EPA does not provide such criteria. A judgment on the adequacy of any facility is left to a particular regional, or State, permitting authority and is made in an ad hoc manner, with little uniformity among regions. Thus, a facility design may be judged adequate by permitting authorities in the one region of the country and could be considered inadequate in another. This lack of continuity creates problems for the regulated community and confusion as well as potentially unfounded fears for the public.

The OTA system would require standards that are set in concert with the hazard potential of the waste being treated. Thus, instead of setting performance standards that may be aimed at a medium level of hazard and applied to all facilities, each facility design would be limited in the type of waste it could receive. If very stringent controls and design considerations are followed, the facility could treat or contain highly hazardous substances. However, if a facility design did not include specific controls or if the surrounding environment presented high potential risk (i.e., ground water sources nearby), the facility could be permitted to treat only less or low hazardous waste.

Monitoring programs, siting requirements, and performance standards set by this system all would reflect differences in degree of hazard that a facility could pose to human health and environment. This correlation, the technical and philosophical crux of a degree of hazard system, would address in a significant manner the overwhelming concern of the public about potential *adverse effects, and thus contribute to more effective siting activities*. For example, assuming that a treatment facility (e.g., an incinerator) has readily verifiable operating parameters and controlled effluent streams that are subject to strict monitoring, the critical technical considerations for siting become more a function of confidence in:

1. the ability of a technology to reduce the hazard,
2. the ability of the surrounding environment to tolerate possible, and limited, adverse effects of any deviations from optimum operating conditions, and
3. the requirements for special handling of wastes.

General environmental hazards (i.e., locations of flood plains, or obvious waste transport pathways, seismic activity, and distance to potential populations at risk) must be addressed in siting facilities for any range of available treatments. These variables also are critical for siting storage/containment facilities, but additional requirements for rigorous analysis of subsurface soil and hydrological characteristics would be included for this kind of facility.

In contrast to management systems that treat the siting of all hazardous waste management technologies similarly, the initial correlation of waste hazard to performance standards for each hazard source helps to focus on those hazardous characteristics that can be changed through treatment of a waste. This approach is positive rather than negative, and could encourage focusing the current siting debate on a discussion of technical possibilities and limitations of different alternative management technologies. In addition, this approach helps to highlight the *differences* between long-term health and environmental consequences of treatment versus containment alternatives. It is precisely these differences that should be brought to the attention of the public.

Siting problems will continue as long as the public distrusts the intent and actions of their government. In many cases, public opposition to siting efforts for hazardous waste management facilities has not been unfounded, as illustrated by the well-publicized case of a landfill in Wilsonville, Illinois. Although both State and Federal environmental agencies stated publicly that the facility was adequate to protect the health of the community, recent investigations indicate that major leakage of contaminants is occuring.

It is not a hopeless situation. Development of an effective hazardous waste management system with well-defined objectives, however, is imperative before any solution can emerge for this continuing stalemate. The objectives of any effective hazardous waste management strategy should include:

1. optimization of control technologies, monitoring efforts, and site requirements for protecting public health and the environment by minimizing over regulation of low hazard waste and under regulation of high hazard waste streams;

2. use of available scientific information on waste components and characteristics of real waste streams to evaluate potential hazard in the event of mismanagement of wastes as opposed to use of risk assessments that generally require considerable amounts of currently unavailable data;

3. reduction of the complexity of hazardous waste problems facing government and industry by defining generic classes of waste hazard, technologies, monitoring approaches and site criteria through which classes of

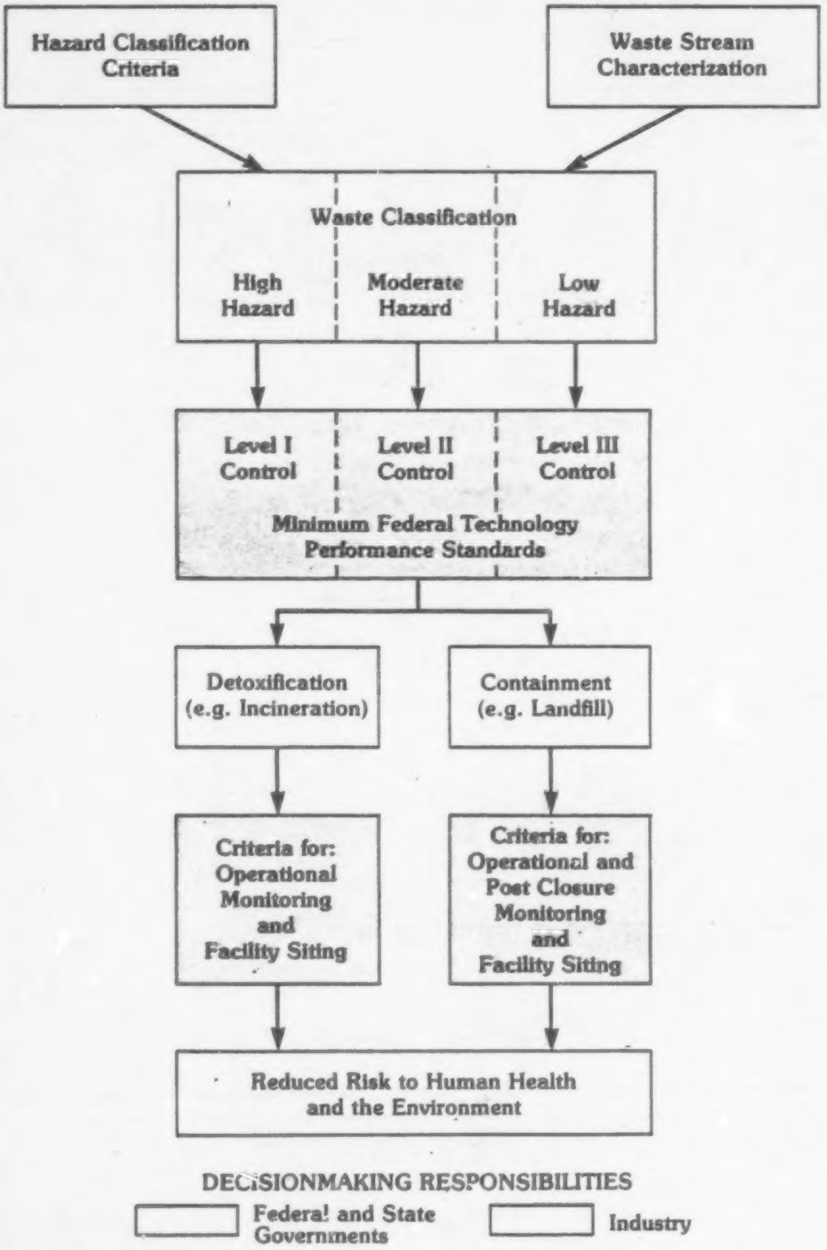
performance standards can be designed;

4. creation of a system that would be simple in structure, would require less government resources to implement, could accelerate the permitting process for both new and existing facilities, and would provide technically sound guidance for siting; and

5. flexibility that would promote incentives for industry to use the most appropriate, effective and perhaps innovative technologies to reduce hazards, would encourage internalization of technology costs, and would insure consistency among State programs while offering an opportunity to develop more stringent regulations.

If these objectives are met, it should be possible to achieve regulatory stability, thus returning to the public a sense of confidence in the ability of regulatory officials to protect public health and the environment. If the intent of the public officials in charge of hazardous waste regulation is questioned, or if the technical information base of the system is considered inadequate, no management system, however comprehensive, can totally reduce public opposition to hazardous waste sites.

OUTLINE FOR A Comprehensive Hazard Assessment - Reduction Management System


Hazard Classification Criteria
Waste Stream Characterization
Waste Classification
High Hazard
Moderate Hazard
Low Hazard
Level I Control
Level II Control
Level III Control
Minimum Federal Technology Performance Standards
Detoxification (e.g. Incineration)
Containment (e.g. Landfill)
Criteria for: Operational Monitoring and Facility Siting
Criteria for: Operational and Post Closure Monitoring and Facility Siting
Reduced Risk to Human Health and the Environment
DECISIONMAKING RESPONSIBILITIES
Federal and State Governments
Industry

SOURCE: Office of Technology Assessment.

CMA
CHEMICAL MANUFACTURERS ASSOCIATION

ORAL STATEMENT OF
PHILIP A. PALMER
OF DUPONT COMPANY
ON BEHALF OF
CHEMICAL MANUFACTURERS ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS
UNITED STATES SENATE
ON
RCRA REAUTHORIZATION

April 26, 1982

2501 M Street, NW • Washington, DC 20037 • Telephone 202/887-1100 • Telex 89617 (CMA WSH)

My name is Philip A. Palmer. I am an employee of the DuPont Company and Chairman of the RCRA Regulations Task Group of the Chemical Manufacturers Association. CMA is a trade association with over 180 member companies that account for more than 90% of the total production capacity for basic industrial chemicals in this country.

The CMA welcomes this opportunity to reaffirm its strong and continuing support for the Resource Conservation and Recovery Act of 1976, as amended, and to urge reauthorization of this important statute without amendment. Sound and comprehensive federal regulations for the proper management of hazardous wastes should encourage the siting, construction and financing of vitally needed hazardous waste treatment, storage and disposal facilities. Such regulations should encourage beneficial use, reuse or recycling of spent materials and by-products and avoid stigmatizing such materials as wastes. Similarly, they should encourage permitting of hazardous waste incinerators and other advanced treatment techniques, while continuing to allow appropriate land disposal of hazardous wastes and to provide a viable permitting scheme for land disposal facilities.

EPA has made commendable progress during the past three years in preparing regulations to implement RCRA so as to achieve these purposes. The current Administration has recently affirmed its support for a strong RCRA regulatory

SCHEME BY PROMULGATING FINANCIAL RESPONSIBILITY STANDARDS FOR HAZARDOUS WASTE MANAGEMENT FACILITIES, INCLUDING A REQUIREMENT THAT THE OWNERS OR OPERATORS OF SUCH FACILITIES OBTAIN LIABILITY INSURANCE TO COMPENSATE FOR DAMAGES TO THIRD PARTIES RESULTING FROM BOTH SUDDEN AND NON-SUDDEN OCCURRENCES AT SUCH FACILITIES. SENSIBLY, THESE REGULATIONS INCORPORATE A "MEANS TEST" BY WHICH ESTABLISHED, FINANCIALLY HEALTHY FIRMS CAN DEMONSTRATE FINANCIAL RESPONSIBILITY AND "SELF-INSURE" WITHOUT HAVING TO PURCHASE OUTSIDE FINANCIAL SERVICES, SUCH AS SURETY BONDS AND WITHOUT HAVING TO OBTAIN INSURANCE.

CMA WELCOMES AND SUPPORTS THESE FINANCIAL RESPONSIBILITY REGULATIONS. NOT ONLY DO THEY AFFIRM THE ADMINISTRATION'S DESIRE TO COMPLETE THE RCRA REGULATORY SCHEME, BUT ALSO THEY SIGNAL THAT THE ADMINISTRATION RECOGNIZES THAT A SOUND BALANCE MUST BE STRUCK AND MAINTAINED BETWEEN PROPER FEDERAL AND STATE ROLES IN THE RCRA IMPLEMENTATION PROCESS.

SITING OF HAZARDOUS WASTE MANAGEMENT FACILITIES

THIS SUBCOMMITTEE HAS EXPRESSED A SPECIAL INTEREST IN THE PROBLEM OF SITING OF NEW HAZARDOUS WASTE MANAGEMENT FACILITIES. BECAUSE OF WIDE PUBLICITY GIVEN CERTAIN ENVIRONMENTAL INCIDENTS RESULTING FROM PAST DISPOSAL PRACTICES AND DUE TO THE INCREASED NATIONAL CONSCIOUSNESS OF ENVIRONMENTAL AND ECOLOGICAL ISSUES DURING THE PAST DECADE, SITING OF

NEW HAZARDOUS WASTE MANAGEMENT FACILITIES HAS BECOME EXTREMELY DIFFICULT AND, IN SOME JURISDICTIONS, IMPOSSIBLE. WHILE RESPONSIBLE CITIZENS RECOGNIZE THAT THE WASTES THAT ARE AN INEVITABLE PRODUCT OF OUR STANDARD OF LIVING MUST BE DISPOSED SOMEWHERE, THESE SAME CITIZENS REMAIN DEDICATED TO PREVENTION OF THE ESTABLISHMENT OF ANY HAZARDOUS WASTE MANAGEMENT FACILITY IN THEIR COMMUNITIES. PRACTICALLY UNIVERSAL PREVALENCE OF THIS ATTITUDE IS CREATING A _DE FACTO_ BAN AGAINST NEW, MORE ADVANCED HAZARDOUS WASTE MANAGEMENT FACILITIES THAT COULD REPLACE EXISTING, LESS EFFECTIVE ONES. AS EPA'S RCRA REGULATIONS TAKE EFFECT, A NUMBER OF THESE EXISTING FACILITIES MAY BE FORCED TO CLOSE, CREATING ADDITIONAL PRESSURES FOR SITING OF NEW HAZARDOUS WASTE MANAGEMENT CAPACITY. IT IS FOR THESE REASONS, AMONG OTHERS, THAT THE CHEMICAL INDUSTRY BELIEVES THAT SECONDARY MATERIALS WHICH ARE BENEFICIALLY REUSED OR RECYCLED SHOULD NOT BE STIGMATIZED BY BEING LABELED WASTES.

NO SIMPLE SOLUTION TO THE SITING PROBLEM EXISTS. CERTAINLY IT IS IMPORTANT TO MAINTAIN PUBLIC CONFIDENCE THAT, UNDER STRONG FEDERAL LEADERSHIP, EFFECTIVE REGULATION OF SUCH FACILITIES WILL TAKE PLACE AND PROVIDE PROTECTION TO HUMAN HEALTH AND THE ENVIRONMENT. NEVERTHELESS, COMPLETION OF A SOUND REGULATORY SCHEME CANNOT BY ITSELF RESOLVE THE STATE AND LOCAL POLITICAL PROBLEMS POSED BY HAZARDOUS WASTE MANAGEMENT FACILITIES.

ACCORDINGLY, CMA FAVORS STATE-BY-STATE ADOPTION OF SITING LEGISLATION, ESTABLISHING SPECIAL HAZARDOUS WASTE SITING COUNCILS THAT CAN CERTIFY THE ENVIRONMENTAL COMPATABILITY AND PUBLIC NECESSITY OF NEW HAZARDOUS WASTE MANAGEMENT FACILITIES AND RESOLVE CONFLICTS REGARDING THE LOCATION OF SUCH FACILITIES. A NUMBER OF STATES HAVE ALREADY ADOPTED SUCH LEGISLATION. TO AID IN THIS VITAL PROCESS, CMA HAS PREPARED AND CIRCULATED A MODEL STATUTE FOR THE SITING, CONSTRUCTION AND FINANCING OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES. WE WOULD BE HAPPY TO FURNISH THIS SUBCOMMITTEE AND ITS STAFF WITH COPIES OF THIS PROPOSAL.

CMA HOPES THAT ENACTMENT OF HAZARDOUS WASTE SITING LEGISLATION ALONG THE LINES PROPOSED IN OUR MODEL STATUTE, TOGETHER WITH A STRONG FEDERAL LEADERSHIP IN THE DEVELOPMENT OF A SOUND AND COMPREHENSIVE REGULATORY SCHEME FOR HAZARDOUS WASTE MANAGEMENT, INCLUDING STRONG ASSURANCES OF FINANCIAL RESPONSIBILITY, WILL EVENTUALLY REDUCE IRRATIONAL BARRIERS TO FACILITY SITING. UNLESS SUCH BARRIERS CAN BE OVERCOME, CONSTRUCTION OF ADVANCED HAZARDOUS WASTE MANAGEMENT FACILITIES WILL BE PREVENTED.

FOR THE FOREGOING REASONS CMA WELCOMES THE INTEREST OF THIS SUBCOMMITTEE IN THE SITING PROBLEM. CONGRESS SHOULD CONTINUE TO MONITOR THIS SITUATION TO ASSURE COMPLETION OF THE FEDERAL REGULATORY REGIME AND TO ASSESS THE PROGRESS OF STATES IN ADOPTING FACILITY SITING LAWS.

INDUSTRY PRACTICES WITH RESPECT TO HAZARDOUS WASTE MANAGEMENT

THIS SUBCOMMITTEE HAS EXPRESSED AN INTEREST IN LEARNING ABOUT HISTORICAL TRENDS IN THE TREATMENT AND DISPOSAL OF HAZARDOUS WASTE BY THE CHEMICAL INDUSTRY, WITH EMPHASIS ON THE CHOICE BETWEEN ONSITE AND OFFSITE DISPOSITION OF WASTES. REGRETTABLY, AN ADEQUATE DATA BASE ON THIS SUBJECT DOES NOT EXIST. THE FOLLOWING OBSERVATIONS REPRESENT ONLY A BEST EFFORT TO ESTIMATE TRENDS.

THE ONLY EXISTING DATA THAT ARE OF ANY PRACTICAL UTILITY ARE THOSE GATHERED BY THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATION OF THE HOUSE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE IN 1979. THIS SURVEY REVEALED THAT BETWEEN 1950 AND 1979, 54 CHEMICAL COMPANIES TREATED OR DISPOSED OF 93% OF THEIR PROCESS WASTES ONSITE AND 7% OFFSITE. DURING THE SAME PERIOD, 99% OF SUCH CHEMICAL INDUSTRY WASTE WAS TREATED OR DISPOSED OF IN THE SAME STATE IN WHICH IT WAS GENERATED. IT DESERVES EMPHASIS THAT THIS SURVEY WAS CONDUCTED BEFORE EPA PROMULGATED FINAL REGULATIONS DEFINING "SOLID WASTE" AND "HAZARDOUS WASTE" AND ACCORDINGLY, THE DATA ARE NOT NECESSARILY COMPARABLE TO DATA THAT MIGHT BE GATHERED USING CURRENT AND EMERGING REGULATORY DEFINITIONS OF THESE TERMS.

MOREOVER, WE BELIEVE THAT THESE GROSS STATISTICS MASK CERTAIN TRENDS THAT MAY BE SIGNIFICANT. THE STATISTICS ARE ACCURATE TO THE EXTENT THAT THEY AFFIRM THAT HISTORICALLY

MOST OF THE WASTE THAT WAS GENERATED BY CHEMICAL MANUFACTURERS WAS TREATED OR DISPOSED ONSITE. THIS SURVEY DOES NOT ADEQUATELY REFLECT THE EXTENT TO WHICH, IN MORE RECENT YEARS, HAZARDOUS CHEMICAL WASTES HAVE BEEN SENT TO OFFSITE TREATMENT OR DISPOSAL AS NEW, WELL-DESIGNED AND WELL-MANAGED COMMERCIAL FACILITIES BECAME AVAILABLE. THIS TREND HAS ALLOWED CLOSURE OF SMALL ONSITE LANDFILLS.

FURTHER IT IS IMPORTANT TO KEEP IN MIND THAT CHEMICAL MANUFACTURERS ARE FINDING NEW WAYS TO MAKE PRODUCTIVE AND BENEFICIAL USE OF SPENT AND BY-PRODUCT MATERIALS, THEREBY REDUCING THE VOLUME OF WASTES THAT MUST BE DISPOSED. ALSO, THEY ARE SEEKING MEANS TO REDUCE THE AMOUNT OF SUCH MATERIALS INITIALLY GENERATED. THE CHEMICAL INDUSTRY'S PRIORITY IS TO REDUCE WASTE GENERATION AND TO REUSE OR RECYCLE SECONDARY MATERIALS. ONE IMPORTANT ASPECT OF SUCH REUSE IS THE BURNING OF BY-PRODUCTS AS FUEL IN INDUSTRIAL BOILERS BY THE GENERATORS OF THESE BY-PRODUCTS. DISINCENTIVES TO SUCH PRACTICES SHOULD BE AVOIDED. EPA IS CURRENTLY UNDERTAKING A COMPREHENSIVE STUDY OF THE BURNING OF SECONDARY MATERIALS AS FUELS IN BOILERS. CMA MEMBERS ARE COOPERATING IN THIS STUDY. IT IS OUR EXPECTATION THAT A THOROUGH STUDY OF THESE BURNING PRACTICES WILL REVEAL THAT HIGH COMBUSTION EFFICIENCIES ARE ACHIEVED, AND THAT SUCH BURNING POSES NO SUBSTANTIAL RISK OF HARM TO HUMAN HEALTH OR THE ENVIRONMENT.

CONCLUSION

THE CMA SUPPORTS REAUTHORIZATION OF RCRA WITHOUT AMENDMENT. IT IS A SOUND AND VITALLY IMPORTANT STATUTE. REGULATORY IMPLEMENTATION OF RCRA SHOULD SOON BE COMPLETE, DESPITE THE SUBSTANTIAL CONCEPTUAL OBSTACLES EPA HAS HAD TO OVERCOME DURING RULEMAKING. COMPLETION OF THE REGULATORY SCHEME SHOULD ENHANCE PUBLIC CONFIDENCE THAT HAZARDOUS WASTES WILL RECEIVE SAFE MANAGEMENT. IN ADDITION, THE CREATION OF STATE SITING COUNCILS SHOULD HELP OVERCOME CURRENT LOCAL, POLITICAL HOSTILITY TO SITING OF NEEDED HAZARDOUS WASTE MANAGEMENT FACILITIES. BENEFICIAL REUSE AND RECYCLING OF BY-PRODUCTS AND SPENT MATERIALS CAN MINIMIZE THE GENERATION OF AND NEED FOR DISPOSAL OF HAZARDOUS WASTE AND, ACCORDINGLY, SUCH PRACTICES SHOULD BE ENCOURAGED.

CMA

CHEMICAL MANUFACTURERS ASSOCIATION

WRITTEN STATEMENT OF
PHILIP A. PALMER
OF DUPONT COMPANY
ON BEHALF OF
CHEMICAL MANUFACTURERS ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS
UNITED STATES SENATE
ON
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April 26, 1982

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My name is Philip A. Palmer. I am an employee of the DuPont Company and Chairman of the RCRA Regulations Task Group of the Chemical Manufacturers Association. CMA is a trade association with over 180 member companies that account for more than 90% of the total production capacity for basic industrial chemicals in this country.

The CMA welcomes this opportunity to reaffirm its strong and continuing support for the Resource Conservation and Recovery Act of 1976, as amended, and to urge reauthorization of this important statute without amendment. CMA recognizes that, in order for the nation to obtain the full benefit of the products of our industry, its citizens must be protected against the risks to human health and the environment that may be posed by hazardous wastes. Thus, in a real sense, our industry depends upon sensible federal leadership, and the public reassurance that it can give, with respect to the regulation of hazardous wastes. We believe that RCRA, in its current form, is an appropriate vehicle for such federal leadership.

Sound and comprehensive federal regulations for the proper management of hazardous wastes should encourage the siting, construction and financing of vitally needed hazardous waste treatment, storage and disposal facilities. Such regulations should encourage beneficial use, reuse or recycling of spent materials and by-products and avoid stigmatizing such materials as wastes. Similarly, they should encourage permitting of hazardous waste incinerators and other advanced treatment techniques, while continuing to allow appropriate land disposal of hazardous wastes and to provide a viable permitting scheme for land disposal facilities.

Status of Development of Regulations

We recognize that questions are being raised regarding the pace at which EPA is implementing RCRA. Moreover, we are conscious that skepticism has been voiced by some regarding the resolve of the current Administration to complete and maintain a sound regulatory framework for hazardous waste management. Such critics fail to take adequate account of the difficulty and complexity of the tasks imposed on EPA by RCRA.

It is clear in retrospect that the initial statutory deadlines for promulgation of regulations under RCRA were unrealistic. At the time RCRA was enacted, few states had in place schemes for regulation of hazardous wastes, and none of these were nearly as comprehensive as the one that EPA is required to adopt under RCRA. Accordingly, EPA's regulatory development process had to begin without fully adequate models. The range of tasks faced by the Agency was immense. For instance, simply defining the Agency's regulatory jurisdiction through definition of what are "solid wastes" and which among them are "hazardous" continues to prove a task of great complexity. Overbroad definition of the term "solid waste" will inhibit beneficial recycle and reuse. Overbroad definition of what constitutes a "hazardous" waste could swamp the regulatory system and divert attention away from wastes posing the most real and direct hazards to human health and the environment.

EPA has encountered the greatest difficulty, and, consequently, the longest delays have resulted in the development of permitting standards for land disposal facilities. The Agency has stated that it may have such standards ready by June of 1982, and CMA favors the earliest possible publication of these regulations.

Despite the complexity encountered in implementing regulations, EPA has made commendable progress, especially during the past three years. The current Administration has recently acted to affirm its support for a strong RCRA regulatory scheme by promulgating financial responsibility standards for hazardous waste management facilities, including a requirement that the owners or operators of such facilities obtain liability insurance to compensate for damages to third parties resulting from both sudden and non-sudden occurrences at such facilities. Sensibly, these regulations incorporate a "means test" by which established, financially healthy firms can demonstrate financial responsibility and "self-insure" without having to purchase outside financial services, such as surety bonds and without having to obtain insurance.

CMA welcomes and supports these financial responsibility regulations. Not only do they affirm the Administration's desire to complete the RCRA regulatory scheme, but also they signal that the Administration recognizes that a sound balance must be struck and maintained between proper federal and state roles in the RCRA implementation process.

Recycle or Reuse

In regulations initially published in May of 1980, and in proposed amendments to these regulations currently undergoing review at EPA, the Agency has construed RCRA expansively with respect to its authority to regulate materials destined for beneficial recycle or reuse. CMA maintains that such materials are not discarded or intended for discard and, as such, are not the proper subject of regulation under RCRA. Moreover, regulation of recycle or reuse activities can deter such activities, even though it is widely recognized that they are the most desirable ways to reduce the quantity of hazardous waste requiring long-term care. Significant economic incentives exist to reduce waste volumes by such means as recycling or reusing hazardous by-products of chemical manufacturing activities. Many of these by-products have considerable fuel value and, in an era of rising energy prices, they have been substituted for conventional fuels in boilers used to generate energy for use in manufacturing processes. Similarly, techniques have been pursued to recover other valuable organic and inorganic materials as raw material costs have risen. Such practices should be nurtured and disincentives to such practices avoided. Unnecessarily stigmatizing such secondary materials as hazardous wastes and closely regulating their movement in commerce poses such disincentives.

EPA is currently undertaking a comprehensive study of the burning of secondary materials as fuel in boilers. This activity is not now regulated, although the Agency claims authority to regulate such burning. CMA members are cooperating in EPA's study, despite our belief that the Agency lacks authority to regulate such beneficial reuse of secondary materials. It is our expectation that a thorough study of these burning practices will reveal that high combustion efficiencies are achieved, and that such burning poses no substantial risk of harm to human health or the environment.

Siting of Hazardous Waste Management Facilities

This Subcommittee has expressed a special interest in the problem of siting of new hazardous waste management facilities. Because of wide publicity given certain environmental incidents resulting from past disposal practices and due to the increased national consciousness of environmental and ecological issues during the past decade, siting of new hazardous waste management facilities has become extremely difficult and, in some jurisdictions, impossible. While responsible citizens recognize that the wastes that are an inevitable product of our standard of living must be disposed somewhere, these same citizens remain dedicated to prevention of the establishment of any hazardous waste management facility in their communities. Practically universal prevalence of this attitude is creating a de facto ban against new, more advanced hazardous waste management facilities that could replace existing, less effective ones. As EPA's RCRA regulations take effect, a number of these existing facilities may be forced to close, creating additional pressures for siting of new hazardous waste management capacity. It is for these reasons, among others, that the chemical industry believes that secondary materials which are beneficially reused or recycled should not be stigmatized by being labeled hazardous wastes.

No simple solution to the siting problem exists. Certainly it is important to maintain public confidence that, under strong federal leadership, effective regulation of such facilities will take place and provide protection to human health and the environment. Nevertheless, completion of a sound regulatory scheme cannot by itself resolve the state and local political problems posed by hazardous waste management facilities.

Accordingly, CMA favors state-by-state adoption of siting legislation, establishing special hazardous waste siting councils that can certify the environmental compatability and public necessity of new hazardous waste management facilities and resolve conflicts regarding the location of such facilities. A number of states have already adopted such legislation. To aid in this vital process, CMA has prepared and circulated a model statute for the siting, construction and financing of hazardous waste treatment, storage and disposal facilities. We would be happy to furnish this Subcommittee and its staff with copies of this proposal. In addition to calling for the creation of hazardous waste siting councils to develop state-wide facility plans and certify the public necessity of applications to build facilities, this legislation would provide powers for condemnation of land for hazardous waste facility siting, including preemption of local zoning and, as a last resort, allow for state financing, construction and operation of hazardous waste facilities.

CMA hopes that enactment of hazardous waste siting legislation along the lines proposed in our model statute, together with a strong federal leadership in the development of a sound and comprehensive regulatory scheme for hazardous waste management, including strong assurances of financial responsibility, will eventually reduce irrational barriers to facility siting. Unless such barriers can be overcome, construction of advanced hazardous waste management facilities will be prevented.

For the foregoing reasons CMA welcomes the interest of this Subcommittee in the siting problem. Congress should continue to monitor this situation to assure completion of the federal regulatory regime and to assess the progress of states in adopting facility siting laws.

Industry Practices With Respect to Hazardous Waste Management

This Subcommittee has expressed an interest in learning about historical trends in the treatment and disposal of hazardous waste by the chemical industry, with emphasis on the choice between onsite and offsite disposition of wastes. Regrettably, an adequate data base on this subject does not exist. The following observations represent only a best effort to estimate trends.

The only existing data that are of any practical utility are those gathered by the Subcommittee on Oversight and Investigation of the House Committee on Interstate and Foreign Commerce in 1979. This survey revealed that between 1950 and 1979, 54 chemical companies treated or disposed of 93% of their process wastes onsite and 7% offsite. During the same period, 99% of such chemical industry waste was treated or disposed of in the same state in which it was generated. It deserves emphasis that this survey was conducted before EPA promulgated final regulations defining "solid waste" and "hazardous waste" and accordingly, the data are not necessarily comparable to data that might be gathered using current and emerging regulatory definitions of these terms.

Moreover, we believe that these gross statistics mask certain trends that may be significant. The statistics are accurate to the extent that they affirm that historically most of the waste that was generated by chemical manufacturers was treated or disposed onsite. This survey does not adequately reflect the extent to which, in more recent years, hazardous chemical wastes have been sent to offsite treatment or disposal as new, well-designed and well-managed commercial facilities became available. This trend has allowed closure of small onsite landfills.

Further it is important to keep in mind that chemical manufacturers are finding new ways to make productive and beneficial use of spent and by-product materials, thereby reducing the volume of wastes that must be disposed. Also, they are seeking means to reduce the amount of such material initially generated. The chemical industry's priority is to reduce waste generation and to reuse or recycle secondary materials. As already noted, an important aspect of such reuse is the burning of by-products as fuel in industrial boilers operated by the generators of the by-products. Ultimately, some materials must be land disposed on- or offsite -- including residues from treatment processes such as incineration and inorganic sludges generated by efforts to control air and surface water discharges.

Conclusion

The CMA supports reauthorization of RCRA without amendment. It is a sound and vitally important statute. Regulatory implementation of RCRA should soon be complete, despite the substantial conceptual obstacles EPA has had to overcome during rulemaking. Completion of the regulatory scheme should enhance public confidence that hazardous wastes will receive safe management. In addition, the creation of state siting councils may lessen current local, political hostility to siting of needed hazardous waste management facilities. Beneficial reuse and recycling of by-products and spent materials can minimize the generation of and need for disposal of hazardous waste and, accordingly, such practices should be encouraged.

STATEMENT OF
RITA M. LAVELLE
ASSISTANT ADMINISTRATOR
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

APRIL 26, 1982

Mr. Chairman, I appreciate this opportunity to review the progress the Environmental Protection Agency has made and will be making in implementing Subtitle C of the Resource Conservation and Recovery Act (RCRA). In so doing I will present the status and future plans for each of the four aspects of our program: (1) regulation development, (2) State authorization, (3) issuance of permits, and (4) compliance monitoring. I will also address two additional issues as you requested: Facility siting and capacity assessment.

Regulation Development

Overall Status. In the area of hazardous waste regulations required by Subtitle C of RCRA we today have a major list of accomplishments. We have promulgated major regulations covering and defining:

- listing and identification of hazardous wastes;
- generator standards;
- transporter standards;

- -- interim status standards applicable to existing storage, treatment and disposal facilities;
- -- procedural standards for issuing permits and authorizing States (part of the Consolidated Permit Regulation);
- -- permitting standard for storage and treatment facilities and location standards for all types of facilities;
- -- financial assurance for closure/post-closure costs;
- -- third party liability insurance;
- -- permitting standards for existing interim status incinerators; and
- -- permitting standards for existing interim status storage surface impoundment.

I would first like to discuss the latter two standards on incinerators and surface impoundments.

Permitting Standards for Existing Interim Status Incinerators. On January 23, 1981, EPA promulgated standards to be used in permitting new and existing incinerators. Several public commenters contended these standards could not be met by existing incinerators and would cause them to close with a loss of needed incineration capacity. They also complained that the Agency had failed to consider a distinction between standards applicable to new and existing facilities as required by a 1980 amendment to RCRA. Because the new Administrator again wished to make her own judgments on these comments, EPA in October 1981 proposed suspending the compliance date of standards applying to existing facilities.

We also announced a policy of not calling for Part B permit applications and initiating the permitting process for existing incinerators during the rulemaking period. We currently are carefully reviewing the comments on this proposal. A decision is likewise undergoing review within the Agency and will be published when that review process is completed.

Permitting Standards for Existing Interim Status Storage Surface Impoundments. On January 12, 1981, EPA promulgated standards for permitting new and existing storage surface impoundments--a very small class of surface impoundments. As with the incinerator standards just discussed, public comments claimed this requirement could not be feasibly met by many existing facilities and that it failed to make the statutorily-required distinction between new and existing facilities. Consequently, in October 1981, we proposed suspension of this requirement as applicable to existing facilities until we could examine the matter. Public comments have now been assessed. Because the interim requirement is closely associated with the broader set of surface impoundment requirements which are a part of our overall land disposal standards, the Agency's decision on suspension of these standards will be included in the latter promulgation.

To complete the requirements of Subtitle C, EPA is moving diligently toward promulgation of two additional regulations: permitting standards for existing land disposal facilities, and permitting standards for new land disposal facilities. Let me discuss these regulations with you briefly.

Permitting Standards for Existing Land Disposal Facilities and Permitting Standards for New Land Disposal Facilities. On February 13, 1981, EPA reproposed standards for permitting new and existing land disposal facilities. These proposed standards, developed by the last Administration, were roundly criticized by public commenters as totally unworkable. Consequently, following the close of the comment period on these proposed standards in October 1981, we began redevelopment of a land disposal regulation. Shortly after starting on this task, the District Court, ruling on the case Illinois vs. Gorsuch, ordered us to promulgate land disposal standards for existing land disposal facilities by Februry 1 of this year. We immediately began a crash effort to comply with this order even though we believed the Court was unjustified in setting a date that would be impossible to meet with sound, workable, responsible standards. The

February 1 date was subsequently changed to February 15 by the District Court and then stayed by the Court of Appeals, which decided last week to hear the case on an expedited time schedule. In the meantime, we have continued to work diligently to develop a land disposal regulation. Indeed, our land disposal experts have been devoted exclusively to this task since mid-November; many have been working 60-hour weeks in this effort. We hope to soon have a draft ready for internal Agency review and will move as quickly as possible to present it to the Administrator for a decision. You may be sure the regulation will be promulgated as soon as all appropriate reviews are satisfactorily completed.

Although our primary focus in this effort is the development of standards applicable to existing land disposal facilities, we are also including standards applicable to new facilities so that we can replace the temporary standards for new land disposal facilities currently in effect. They have proven very difficult to implement because of their non-specificity.

In short, the last of the Subtitle C regulations are well along the road towards promulgation. We have been conscientious in our efforts to publish workable, realistic regulations--some of the most highly technical in government--that will ensure protection of human health and safety as well as the environment.

Minor Amendments. Any reasonable consideration of these various regulations must begin with the recognition that they are undoubtedly the most complex promulgated and implemented by the Federal government. The Administrator also clearly recognizes that promulgation is fruitless if the regulations are unworkable. We have made and will continue to develop, therefore, amendments which are necessary to make our hazardous waste regulations more workable. Our recent proposal of a uniform manifest form is an example of such an amendment. It, like most of these amendments, responds to problems identified in public comments on our regulations, most of which were promulgated in interim final form pending that comment. Others are in response to issues raised by litigants in the several consolidated cases for judicial review pending on these regulations. Finally, some of the amendments respond to petitions for regulatory changes received by the Agency. We have been systematically addressing these problems and have promulgated or proposed over 30 amendments to date. In some cases, we are able to publish final or interim final amendments. In other cases we have found it necessary to propose amendments in order to obtain public participation in the changes contemplated. Typically, the amendments deal with the tough, complex issues and problems which were not adequately dealt with in the original regulation. For example, the amendment on redefinition of solid waste, which we are developing, has gone through no less than 37 drafts and has taken a year to develop. We absolutely deny, Mr. Chairman, some people's allegations that the continuing flow of amendments to our regulations is a systematic effort to deregulate. This is absolutely untrue. Our objective is to make the regulations workable. This means they must also be reasonable, not only from the Federal standpoint, but from that of the States and private industry. If reasonable and practical regulations are achieved, free market incentives and ingenious American technology will respond by producing the human health and environmental protection which we all seek. On the other hand, we do not believe it serves the public's purpose to inflict upon various segments of the economy a financial penance which is the inevitable result of vague and impractical regulations. This sort of generalization must accept a share of responsibility in the stifling of our national industrial growth in recent years. It is a luxury which the nation clearly can no longer afford.

Regulatory Impact Analysis. The Administration believes the foregoing philosophy is what the Congress intended when it enacted the Resource Conservation and Recovery Act. Accordingly, the President has--through Executive Order 12291--required that EPA perform Regulatory Impact Analyses (RIA's) on all our regulations promulgated after January 1981. We are currently performing RIA's on each of the following regulations:

- permitting standards for storage facilities;
- permitting standards for incinerators;
- permitting standards for land disposal facilities (landfills, surface impoundments, and land treatment facilities); and
- financial assurance/third party liability insurance requirements.

These analyses are scheduled for completion next year. After appropriate amendments are developed, rulemaking initiated, and public comments solicited and analyzed, the justified amendments and all of our regulations will be finalized. At this time our target is to complete the entire process as early as possible in 1984.

Let me reiterate that our objective in all of these actions is to make the regulations more workable. In some cases, regulations may be eased; in others they undoubtedly will be strengthened. Above all, they will be made more workable and effective by tailoring their requirements to the types of hazards posed by particular types of waste, particular types of facilities, and particular environmental settings in which the facilities are located. In this effort, we will identify wastes which are so toxic, persistent and mobile that they must not be landfilled. By the same token, the sufficiency of lesser requirements will become obvious, for instance, for certain types of foundry wastes. We will also acknowledge the different consequences of locating landfills in alternative environmental settings.

In summary, our Regulatory Impact Analyses will be focused upon fine-tuning our regulations--determining the type and level of hazardous waste management that is the most cost beneficial to specific situations.

State Authorization

RCRA authorizes and, indeed, encourages EPA to authorize the States to implement State hazardous waste management programs in lieu of the Federal program--but only where the State program is equivalent to or more stringent than the

Federal program. The statute authorizes both interim authorizations and full authorizations. Because of the phased promulgation of our regulations, we have put interim authorizations on a phased basis: Phase I interim authorizations enable the States to regulate generators, transporters (including the manifest system) and existing interim status treatment, storage and disposal facilities; Phase II interim authorizations enable the States to permit treatment, storage and disposal facilities.

Even though most States have had to obtain additional legislation and/or promulgate additional regulations to achieve equivalency with the Federal program, State response has been excellent. To date, we have granted Phase I interim authorization to 29 States. We expect this figure to grow to 34 before the end of the current fiscal year. We have granted Phase II interim authorization to three States, North Carolina Texas, and Arkansas. This figure is expected to grow to eight by the end of the fiscal year. Promulgation of our full set of hazardous waste regulations will enable us to extend full authorization to the States. This we intend to do. Such action will start the two-year clock specified in RCRA, during which time all interim authorizations must be converted to full authorizations or the hazardous waste program for the State reverts to EPA implementation. We expect most of the States to gain full authorization by the end of the two-year period.

Assisting the States in developing authorized programs and expeditiously processing State authorization applications has been and will continue to be a high priority for our regional RCRA programs.

Issuing Permits

In those States which have not obtained Phase II interim authorization--or, ultimately, full authorization--EPA is responsible for issuing or denying RCRA permits to hazardous waste treatment, storage and disposal facilities. This activity is composed of two parts: processing permit applications for new facilities and calling in and processing permit applications for existing interim status facilities.

To date we have issued one storage permit and one storage/treatment permit for new facilities. We have in process ten permit applications for new facilities--principally for storage or storage/treatment facilities--and 22 permit applications for major facilities--incinerators, landfills, treatment facilities, or some combination of these, usually with associated storage facilities.

Our regions, obviously, have not yet gained a great deal of experience in permitting hazardous waste management facilities. To assist them through the learning process as well as to develop nationally consistent, high-quality permits, we have formed Permit Assistance Teams composed of the best experts from within our regions, headquarters and research laboratories. These teams will participate in development of all major permits, particularly land disposal and incinerator permits. We also involve the respective States in developing new permits for two reasons: (1) in most cases, the States will inherit these permits when their programs are authorized, and (2) since most States have their own permitting programs (even though not yet authorized), it makes sense to coordinate the dual permitting activities wherever possible.

Regarding existing interim status facilities, EPA and eventually the States face the need to issue or deny permits to 10,600 such facilities--the approximate number of existing facilities that have filed Part A permit applications. Approximately 2,800 of the facilities include one or more major units--an incinerator, landfill, land treatment unit or surface impoundment. The remaining 7,800 facilities are storage or treatment facilities. The former type of facilities will typically take more time and resources to permit because they are more complex facilities. Also typically they could pose greater environmental hazards than storage and treatment facilities. Land disposal standards for existing land disposal facilities will not become effective until later this year. The current policy--now under review--has been not to initiate permitting for existing incinerators until resolution of the proposed suspension of the standards for these facilities. We are therefore now concentrating our efforts on processing permits for existing storage and treatment facilities. As of March 23, we have called in 307 Part B applications and expect to have called in an additional 500 Part B applications by the end of the fiscal year. Because the permit applicant has up to six months to submit a Part B application and because it takes several months to review and process a permit application, final action--issuance or denial of a permit--on most of the 800 permit applications called in this year will occur in fiscal year 1983.

While we have not yet developed a final permitting strategy, we are examining an approach that would concentrate our attention and that of the States during the next four years on processing permits for new and existing land disposal and incinerator facilities. We would like to initiate permitting for all of the 2,800 facilities in these categories and issue or deny permits to as many as possible during this period. It is too early to estimate the degree to which we can achieve this goal. It depends on how many States assume Phase II interim authorization or full authorization, the permitting capacity of these States, the cooperation we obtain from unauthorized States with which we have cooperative agreements, and whether our workload estimates for issuing these types of permits are valid.

Under this strategy, we would largely leave the permitting of about 7,800 storage and treatment facilities, except for what we accomplish in this year's Part B call-in's, to 1987 and later years. We believe these facilities pose comparatively less risk to human health and the environment, are comparatively better regulated by the interim status standards, and can be handed adequately by inspections and, where appropriate, enforcemet actions.

Compliance Monitoring

Currently, EPA is responsible for monitoring compliance with and enforcing the Phase I regulations in 28 States and jurisdictions --those which have not received Phase I authorization. The Phase I regulations include the generator standards, transporter standards--including the manifest requirements--and interim status standards. As we issue permits, we will be responsible for monitoring and enforcing those permits in States which do not have Phase II or full authorization.

Our current goal is to inspect each year 10 percent of the generators, all major interim status facilities, and half of the other interim status facilities. In addition, we inspect any alleged violation of our standards, such as reports indicating that manifested hazardous wastes have not been delivered to a designated interim status or permitted facility. Typically, we work closely with the States under cooperative agreements. In some cases, we divide inspection responsibilities between ourselves and the State and, in other cases, we make joint inspections with the States.

Both EPA and those States which have received interim authorization have moved aggressively to implement its compliance monitoring and enforcement activities under RCRA.

At the Federal level, EPA regional offices conducted a total of 1,495 inspections of generators, transporters and interim status facilities in FY 1981 and a total of 477 inspections for the first five months of the current fiscal year.

Our regions took a total of 665 enforcement actions in FY 1981, including 479 notices of violation and 186 administrative orders. During the first five months of FY 1982, our regions undertook 207 enforcement actions, including 82 administrative orders and 125 notices of violations.

Of course, under RCRA, the States are assuming a large portion of the responsibility for initiating compliance inspections and undertaking appropriate enforcement activities. Data gathered by the Agency indicates that the States are meeting this responsibility as they receive interim authorization under the program.

Phase I interim authorized States undertook 3,112 inspections in FY 1981 and 1,955 inspections so far in FY 1982. These States also issued a total of 795 warning letters and 322 administrative or judicial orders in FY 1981, and 424 warning letters and 45 judicial or administrative orders thus far in FY 1982.

As more States are granted interim authorization--or advance to final authorization--we anticipate that oversight of hazardous waste facilities will improve correspondingly through the joint efforts of the Federal/State partnership.

Other Items

You asked us to address two specific issues: Incentives for the siting of hazardous waste facilities, and assessment of the need for hazardous waste disposal and treatment capacity.

Siting. As you are probably aware, EPA has taken the position that the private sector should play the lead role in assuring that facilities are sited. Where the private sector is not successful and governmental involvement is necessary, however, EPA believes that the States, either separately or in regional groups, must assume the responsibility for the establishment of adequate capacity. At their annual winter meeting in February 1981, the nation's Governors unanimously approved a report on the siting of hazardous waste facilities that supports the Agency's position.

Capacity. To accurately gauge the amount of capacity actually needed is a highly complex task. The Agency completed a study in 1981 indicating that, while there were areas of the country with immediate capacity problems, the nation overall had adequate commercial capacity to implement the hazardous waste regulatory program. This study was just updated with a survey of the nine largest commercial firms. The main conclusion of this update is that, is spite of major expansions by the nine firms surveyed, waste volumes processes at their facilities were down from the year before. While the precise reasons for this downturn are not clear, it is probable that the downturn in the economy, shifts toward waste reduction and recovery on the part of generators, and shifts from off-site to on-site hazardous waste management by some large chemical companies are responsible for the increase in available capacity.

To better determine actual capacity needs, the Agency is planning to ask specific questions in its regulatory impact analysis survey work this summer. Reports based on these surveys, which should show trends in volumes and capacities, will be available in the fall.

Conclusion. This completes my status report, Mr. Chairman. I believe we are making good progress toward workable environmental protection and I believe that progress will continue. We feel we are meeting the Congressional mandates of the Resource Conservation and Recovery Act. Furthermore, we are meeting them within the framework of relevant objectives of President Reagan; namely, regulatory reform, control of government spending and transfer of all reasonable authority to State and local governments. Effective management of the statutes affecting hazardous waste within this framework is one of the most challenging management tasks faced by this Administration. The nation's reward will be a series of workable, practical regulations which will not inhibit America's industrial growth but will provide good national health and environmental protection.

I will be happy to respond to any questions you may have.

STATEMENT OF
ROBERT M. PERRY
ASSOCIATE ADMINISTRATOR FOR LEGAL AND ENFORCEMENT COUNSEL AND GENERAL COUNSEL
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

APRIL 26, 1982

Good morning, Mr. Chairman and members of the Subcommittee. I am Robert M. Perry, Associate Administrator for Legal and Enforcement Counsel of the Environmental Protection Agency. I welcome this opportunity to discuss the enforcement policies of EPA with respect to the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and other environmental statutes relating to hazardous waste. I would first like to briefly apprise you of significant progress in enforcement we've made in recent weeks.

On March 26, I was appointed Associate Administrator, having served since July, 1981, as General Counsel of the Agency, a position I continue to hold. Since my appointment, I have devoted virtually my full time to familiarizing myself with my new enforcement responsibilities.

I determined early on that it was important to obtain the opinions and counsel of persons who were familiar with the enforcement process at EPA, not only in Headquarters, but also at the Regional level. In addition, since I must have the close cooperation of other offices in the Agency as well as the Department of Justice, I moved quickly to establish a closer relationship with EPA's environmental enforcement team.

More specifically, in just over four weeks since my appointment, I have:

Formed A Task Force to Review Enforcement Policy and Procedures

This Task Force is composed partly of Headquarters personnel, but primarily of respected attorneys from our Regional offices, who are knowledgeable in the environmental laws and the workings of the Agency. These members can provide a practical, real-life approach to the development of enforcement policy and cases.

The charge to this Task Force was to assist me in becoming familiar with my new reponsibilities by conducting an in-depth review of the structure, policies and procedures of the Office of Enforcement Counsel. Substantial progress has been made in identifying Agency practices and procedures that can facilitate development of cases. The Task Force and I have been meeting daily for the past two weeks with the managers of all operating units of the Office of Enforcement Counsel. This process will be invaluable to me in two critical areas:

- o framing any future decisions on organizational matters, and
- o devising policies and procedures to increase the effectiveness of enforcement performance.

Clarified EPA-Department of Justice Relationship

On April 7, I and members of my senior enforcement staff met with Carol Dinkins, Assistant Attorney General for the Lands and Natural Resources Division of the Department of Justice, and her key associates, in an intensive meeting at Quantico, Virginia. We reviewed ways in which EPA and the Justice Department can support each other more effectively in our joint endeavors. As a result of this very productive meeting, there was developed what we have come to refer to as the "Quantico Guidelines for Enforcement Litigation," which set forth the respective duties and obligations of each agency in the enforcement process. These guidelines have been previously supplied to your staff.

A key feature of these guidelines is the commitment for early participation of the Department through monthly meetings with our Regional enforcement attorneys as potential civil referrals are evaluated, but before a formal case referral is made. Additionally, the guidelines recognize that preparations for litigation should not be interrupted during settlement discussions.

Established Closer Relationships With Assistant Administrators

The enforcement process requires teamwork within the Agency. I have been meeting with the Assistant Administrators to foster this teamwork, and I will be meeting on April 30 with Regional Administrators and Regional Counsels. I have placed particular emphasis on coordinating RCRA and CERCLA activity due to the priority of hazardous waste programs. My staff has participated in the planning meeting held two weeks ago by the Assistant Administrator for the Office of Solid Waste and Emergency Response. Miss Lavelle and I have also contacted Regional Offices to announce a series of meetings in the Regions to discuss our next enforcement efforts at the Superfund priority sites.

Observed An Increase in Enforcement Activity

A. Case Referrals

Within the past few weeks, we have received at Headquarters some 69 cases from the Regional Offices for potential referral to the Department of Justice. This indicates a significant increase in enforcement activity. We are now in the process of reviewing those files and assessing the evidence in consultation with attorneys from the Department of Justice, in keeping with the Quantico Guidelines, and expect to make formal referrals to the Justice Department for filing in the very near future. We continue to emphasize to our field staff the appropriate role of litigation in the enforcement process, in order to assure a sustained and orderly case flow.

Criminal Enforcement

In the area of criminal enforcement, special emphasis has been placed on the investigation and prosecution of illegal hazardous waste activities. Last July, we entered a Memorandum of Understanding with the FBI that has resulted in eight investigative referrals in the hazardous waste area. EPA is providing technical support for these investigations. We are also providing regular training in criminal enforcement at the Federal Law Enforcement Training Center for EPA technical personnel involved in RCRA inspections. This will increase their ability to assist in the investigative process. The emphasis placed on RCRA cases is reflected in our criminal docket. Thus, in an active docket of approximately

65 investigations and referrals, over 35 percent are RCRA cases. This constitutes a dramatic shift in priorities when measured against past criminal dockets that focused almost exclusively on Clean Water Act violations.

As I hope you can see from these actions, we are serious about enforcement and are putting into place the framework for a predictable, firm, and sustained program which will be effective in futhering environmental objectives. I am encouraged that the Administrator's support, together with the talent that is available in the Agency, will combine to make these efforts succeed.

Non-Subtitle C Provisions

Subtitle C of RCRA provides the basic framework for management of hazardous wastes in this country, and a considerable amount of the Agency's energy and resources since the passage of RCRA have been devoted to promulgation of regulations to "flesh-out" and develop the hazardous waste regulatory program. In enforcement, we have concentrated on exercising the authority contained in §7003 of RCRA to abate imminent and substantial endangerment arising from releases or threats of releases of hazardous wastes from specific sites, as well as on issuance of administrative compliance orders, primarily under §3008 of RCRA, to obtain compliance with the hazardous waste regulatory program developed by the Agency.

It is well known that many environmental problems can arise out of the improper disposal of solid waste, and Subtitle D of RCRA is a step toward establishing uniform minimum standards for development and operation of sanitary landfills as environmentally sound repositories for that type of waste. While the development of standards and regulations for solid waste management is within the purview of the Office of Solid Waste and Emergency Response, the Office of Legal and Enforcement Counsel has been and continues to be available to participate with the Office of Solid Waste in development and enforcement of the program.

Subtitle D of RCRA does not contain a provision for issuance of administrative orders for enforcement of standards promulgated under that Subtitle, such as is contained in §3008 of Subtitle C. The reason for the lack of such enforcement authority for Subtitle D is that traditionally, the responsibility for enforcement of laws relating to solid waste management has been that of the states, rather than the federal government. In addition, the problems of solid waste management, while substantial, are generally not of the magnitude, nor as national in scope as those involving hazardous waste management.

However, §7003 of RCRA does authorize the Agency to issue administrative orders or to file a suit in the U.S. District Court for appropriate relief upon a determination that the handling, storage, treatment, disposal, or transportation of any _solid_ or hazardous waste may present an imminent and substantial endangerment to human health and the environment. To date the Agency has filed 62 cases in the Federal courts under this authority to abate imminent and substantial endangerment. While all 62 cases involved hazardous waste, the hazardous wastes are often mixed with solid wastes in an uncontrolled dump site, and the entire volume of wastes in the site must be considered in determining the appropriate remedy.

In the event circumstances are presented to the Agency which justify a determination that the storage, treatment, transportation or disposal of a solid waste alone may present an imminent and substantial endangerment to human health and the environment, and the state is not reacting to the situation in a timely or appropriate manner, we will issue an administrative order or initiate a judicial action under §7003 of RCRA just as readily as would be the case if the endangerment arose from a hazardous waste.

In short, it is immaterial to the enforcement arm of the Agency whether a serious environmental problem arises from a solid waste or a hazardous waste. The key issue is whether an imminent and substantial endangerment exists. If endangerment exists, we are prepared to take action to abate it.

I might add that in a policy guidance memorandum on the use and issuance of §7003 orders prepared on September 11, 1981 (provided earlier to your staff) the Agency emphasized that §7003 applies to both solid and hazardous waste, and that serious problems frequently arise from the improper disposal of solid wastes which might call for taking administrative or judicial action under that section.

Solid waste landfills are also subject to regulation under other statutes administered by EPA, and enforcement actions for violations arising outside the purview of RCRA have been brought. Notable in this regard was the recent criminal conviction of a landfill operator in Pennsylvania who allowed discharges of wastewater exceeding limits in his Clean Water Act permit and falsely reported compliance with the permit requirements.

Policies On Extent Of State Participation In RCRA Enforcement

RCRA provides generally that a state which develops a hazardous waste management program comparable to the federal program developed by EPA shall, upon approval of the state program and authorization by EPA, thereafter administer and enforce the hazardous waste program in that state*. It is clear from this and other provisions, and from the legislative history of the Act that Congress intended that the states have the lead in enforcement of the hazardous waste laws and regulations after their programs are developed and approved. This is also in keeping with the philosophy of this Administration to give the states the opportunity to resolve problems at the local level before asserting the federal presence.

Some 28 states and territories now have the first phase of our interim authorization program under §3006, and with it the primary obligation to enforce the hazardous waste laws and regulations in their states. Under §3008(b) of RCRA, EPA may also take enforcement action in those states after giving notice to the affected state of our intention to do so. We would normally do so only if requested by the state, or if the state had failed to take timely and appropriate enforcement measures.

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* RCRA, Section 3006 (42 USC §6928(a) and (b))

EPA's enforcement role, therefore, in a state with an approved RCRA program, is one of oversight, retaining the authority to take such action as may be necessary in the event the state fails to do so for whatever reason. This is, however, a simplification of a complex area which we have addressed in a comprehensive guidance memorandum issued to Headquarters and Regional personnel on March 15, 1982, entitled "Federal Enforcement of RCRA-Authorized State Hazardous Waste Laws", a copy of which has been provided to your staff.

With regard to states which do not yet have RCRA-authorized hazardous waste programs, EPA has the primary responsibility for enforcement of RCRA and its implementing regulations. This is done primarily by use of administrative compliance orders under §3008, for which our policy guidance has been in place and in use since July 7, 1981. A copy of that guidance memorandum has also been given to the Subcommittee staff.

While EPA is not required by RCRA to formally notify states which do not have an EPA-authorized hazardous waste program, our Regional Offices are usually in close contact with the environmental agency in the affected state. The state is, therefore, usually aware of an impending EPA enforcement action, and has the opportunity to participate or initiate its own actions.

Policy And Standards For Declaration of Imminent Hazard

Prior to the development of the hazardous waste regulatory program which, for the most part, became effective in November, 1980, and the passage of the 1980 amendments to RCRA which added additional administrative order authority, the basis of EPA enforcement against hazardous waste facilities was found in §7003 of RCRA. That section permits EPA to take administrative or judicial action upon a determination that the handling, storage, treatment, transportation, or disposal of hazardous waste may present an imminent and substantial endangerment to human health or the environment.

Also in 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted. Enforcement action under section 106(a) requires a determination that the release or threat of release of a hazardous substance from a facility may present an imminent and substantial endangerment to human health, welfare, or the environment. Therefore, you can see that much of EPA's enforcement authority has been and remains dependent upon a determination of imminent hazard in particular cases.

Some 62 judicial actions have been filed under authority of Section 7003, and a number of those have resulted in decisions which have defined "imminent and substantial endangerment." These cases*, together with those determined under other environmental statutes with similar provisions, have been remarkably uniform.

These judicial decisions and Agency policy hold that evidence of actual harm is not required, but only the risk of harm, to support a determination of "imminent and substantial endangerment." This, in turn, requires consideration of the relationship between the presence of a hazardous substance, the potential for exposure of humans or the environment to that substance, and the known or suspected effect of the substance on human health or the environment. Therefore, if a hazardous substance is released, or threatens to be released, potentially exposing humans or the environment, the endangerment is usually considered by EPA to be "imminent and substantial."

With the addition of authority to issue administrative orders under §7003 by the 1980 amendments, EPA gained a significant new enforcement tool. Recognizing the importance of this authority, EPA's Enforcement Office developed a guidance memorandum which it issued to Headquarters and Regional personnel on September 11, 1981, setting forth policy on the use and issuance of §7003 administrative orders.

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* See Reserve Mining Co. v. EPA, 514 F.2d 492 (8th Cir.); U.S. v. Vertac Chemical Co. et al., 489 F. Supp. 870 (E.D. Ark., 1980); U.S. v. Solvents Recovery Service, 495 F. Supp. 1127 (D.C. Conn., 1980); U.S. v. Midwest Solvents Recovery, 484 F. Supp. 138 (N.D. Ind., 1980); U.S. v. Diamond Shamrock Corp., No. C80-1857 (N.D. Ohio, 1981).

Future Direction of EPA Enforcement Policy

With regard to the long-range enforcement policy of the Agency, I believe that EPA's enforcement program must contain the following basic essentials:

1. Consistency, or Uniformity - The program must contain, wherever possible, a policy for enforcement of a particular statute, or if possible, for enforcement of more than one statute, which will be followed nationwide and industry-wide. This is necessary not only because it enhances the credibility of the Agency and makes enforcement easier, but because the members of the regulated community need to know for planning purposes what to expect from the Agency.
2. Fairness - While enforcement of any statute must be vigorous to realize the purposes of the statute, the enforcement effort must be tempered with reason and equity. Consideration must be given to circumstances which justify use of enforcement discretion, waiver of penalties or imposition of reduced penalties. However, this element of fairness should be integrated into the enforcement policy of the Agency and applied universally, rather than on an *ad hoc* basis, to

avoid the appearance of giving special favor to particular persons. Policies I develop will be guided by this principle.

3. Certainty - Finally it is highly important that the Agency policy be such that the regulated community will know to a certainty that when violations of environmental laws are detected, swift action to obtain or restore compliance and to deter future violations will surely follow. That action may initially be informal or administrative, depending on the violation, but the Agency ultimately has recourse to Federal Courts for the enforcement of its orders, the assessment or collection of penalties, for injunctions and other appropriate relief. The Agency should be fair and uniform in its approach to enforcement, but it must always be willing to use the strongest measures where necessary in order to have a credible and effective enforcement program.

Conclusion

The Administrator and I are strongly committed to a vigorous enforcement policy. This commitment was evidenced by the Goals and Objectives prepared as a part of the Quantico guidelines I mentioned earlier. With these principles to guide us, together with the very competent staff of enforcement attorneys in the Agency, we shall succeed in obtaining the high degree of compliance with environmental requirements which the public expects.

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TESTIMONY

OF

SENATOR FRED ANDERSON
FOR THE COLORADO STATE SENATE
AND THE
NATIONAL CONFERENCE OF STATE LEGISLATURES
ON THE
REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

10:00 A.M.
4200 DIRKSEN SENATE OFFICE BUILDING
APRIL 26, 1982

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Mr. Chairman and members of the Subcommittee, I would like to thank the members of the Subcommittee for this opportunity to testify on the reauthorization of the Resources Conservation and Recovery Act. I am Senator Fred Anderson, President of the Colorado Senate and Chairman of the Natural Resources and Environment Committee of the National Conference of State Legislatures.

I am appearing here today on behalf of the National Conference of State Legislatures and my own State of Colorado's Senate because we are seriously concerned that further delays and modifications by EPA in the promulgation of RCRA regulations, are beginning to have major impacts on state hazardous waste management programs.

The proper management of solid and hazardous waste has been one of the most significant environmental problems which legislatures across the country have faced. Prompted by the enactment of the Resources Conservation and Recovery Act in 1976, virtually all state legislatures have amended solid waste management laws and have undertaken efforts to address virtually every aspect of hazardous waste management from the generation of hazardous waste, to the siting of new hazardous waste management facilities, to insuring the remedy of past improper disposal practices. The attached 150 page compendium of State Hazardous Waste Management Laws, prepared by NCSL, demonstrates this serious commitment on the past of state legislatures to protect the health and safety of their citizens.

While NCSL firmly believes that states should continue to have the primary responsibility for hazardous waste management, states find

THEMSELVES HIGHLY DEPENDENT UPON THE FEDERAL GOVERNMENT TO COMPLETE TECHNICAL STUDIES AND TO PROMULGATE HAZARDOUS WASTE MANAGEMENT REGULATIONS WHICH THEY ARE EXPECTED TO USE TO FRAME STATE PROGRAMS. SPECIFICALLY, THE 1980 AMENDMENTS TO RCRA RECOGNIZED THAT THE FEDERAL HAZARDOUS WASTE MANAGEMENT PROGRAM, WITH WHICH STATES' PROGRAMS MUST BE CONSISTENT AND EQUIVALENT, WOULD SERVE AS A MINIMUM NATIONAL PROGRAM. RCRA EXPRESSLY AUTHORIZES STATES TO IMPOSE MORE STRIGENT REQUIREMENTS THAN THE FEDERAL GOVERNMENT. VIRTUALLY ALL STATE LEGISLATURES HAVE ENACTED LEGISLATION IN RESPONSE TO RCRA'S GOALS AND OBJECTIVES. HOWEVER, NCSL WISHES TO EMPHASIZE THAT IN PASSING SUCH LEGISLATION, STATE LEGISLATURES WERE OFTEN UNDER THE PRESSURE OF BALANCING TWO DIFFERENT AND SOMETIMES COMPETING PROBLEMS: 1) TO ASSURE GENERAL CITIZENRY DEMANDS THAT HEALTH AND ENVIRONMENT BE ADEQUATELY PROTECTED; AND 2) TO TAKE INTO ACCOUNT THE DEMANDS OF THE REGULATED COMMUNITY THAT THE STATE IMPOSE NO MORE STRINGENT REQUIREMENTS THAN THE FEDERAL GOVERNMENT, SO THAT THEY WOULD NOT BE AT A COMPETITIVE DISADVANTAGE WITH INDUSTRIES IN OTHER STATES.

NOW THAT VIRTUALLY EVERY STATE IS SPECIFICALLY AUTHORIZED TO DEVELOP A HAZARDOUS WASTE MANAGEMENT PROGRAM IN KEEPING WITH THE GOALS AND OBJECTIVES OF RCPA, YOU MAY ASK, WHY THEN HAVEN'T ALL STATES ASSUMED INTERIM AUTHORIZATION? WE WOULD RESPOND BY SUGGESTING THAT ONE REASON IS THAT THE STATES HAVE BEEN SLOW IN PROMULGATING REGULATIONS. EPA'S DELAYS AND, OF LATE, CHANGE OF MIND ABOUT PROMULGATING REGULATIONS HAS PROMPTED A "WAIT AND SEE" ATTITUDE AMONG MANY STATES' OFFICIALS. WITH STATE REGULATORY PROCESSES SPANNING MANY MONTHS, STATES ARE HESITANT TO BEGIN THE PROCESS IF THEY FEEL THAT EPA'S FINAL REGULATIONS WILL NECESSITATE A REWRITE OF STATE REGULATIONS.

STATES HAVE FRAMED AUTHORIZING LEGISLATION IN ONE OF THREE WAYS. IN SOME STATES, THE HAZARDOUS WASTE PROGRAM MUST BE "CONSISTENT AND EQUIVALENT" WITH THE FEDERAL PROGRAM. IN OTHERS, THE STATE STATUTE REQUIRES THAT THE PROGRAM BE "NO MORE STRINGENT THAN" THE FEDERAL PROGRAM. IN THE REMAINING STATES, STATUTORY LANGUAGE REQUIRES THAT THE STATE PROGRAMS BE "AT LEAST AS STRICT AS" THE FEDERAL PROGRAM.

RECENT CHANGES AND DELAYS IN IMPLEMENTING THE FEDERAL PROGRAM HAVE LED TO TECHNICAL, LEGAL AND POLITICAL PROBLEMS IN THE STATES, REGARDLESS OF HOW THE STATUTES ARE WORDED. FOR EXAMPLE, WEST VIRGINIA IS AN EXAMPLE OF A STATE THAT DEPENDED UPON THE ADEQUACY OF THE FEDERAL PROGRAM WHEN IT WROTE ITS STATUTE. THE STATUTE REQUIRES THE STATE PROGRAM TO BE "CONSISTENT AND EQUIVALENT" WITH THE FEDERAL REGULATIONS. ADDITIONALLY, LANGUAGE WAS INCLUDED THAT REQUIRES THE STATE TO MAKE REVISIONS IN THEIR PROGRAM AS THE EPA MAKES REVISIONS IN ITS REGULATIONS. THESE TWO REQUIREMENTS AND NUMEROUS CHANGES AT THE FEDERAL LEVEL HAVE CAUSED MANY PROBLEMS FOR THE STATE IN WRITING ITS REGULATION.

THE REGULATED COMMUNITY, IN COMMENTING ON PROPOSED STATE REGULATIONS, HAS ARGUED THAT, WHEN THERE IS AN ABSENCE OF FEDERAL REGULATION DUE TO SUSPENSIONS, MODIFICATIONS OR DELAYS IN EFFECTIVE DATES, THE STATE CANNOT REGULATE IN THAT AREA. THEY ARGUE THAT STATE REGULATIONS IN THESE AREAS WOULD BE INCONSISTENT WITH THE FEDERAL PROGRAM.

For example, West Virginia is being challenged for proposing financial responsibility requirements for hazardous waste facility operators because the federal government delayed the effective date of those requirements. Thus, every time a void in regulatory coverage is created by a shift in federal policy, the state will be challenged on the appropriateness of state action in that particular area. If this type of argument is upheld in the courts, West Virginia will have to wait until federal policy is established in order to even propose regulations.

States with "no more stringent" language in their statutes have a unique problem in dealing with the federal program. They too depend on the adequacy of the federal program. For example, in 1980, an interim committee of the Colorado General Assembly studied the state's hazardous waste problem in light of the RCRA. This committee recommended that Colorado should not establish a state hazardous waste management program because of the comprehensive nature of the federal program. Rather, the committee recommended that the state's existing solid waste siting law be updated to include hazardous waste and give more control of siting decisions to local governments.

During the 1981 legislative session, a bill incorporating the interim committee's recommendations was introduced. ~~Also during that~~ session, a competing bill was introduced, which called for the state to implement a state RCRA program. The General Assembly passed and the governor signed a compromise measure, SB 519, which incorporated portions of both bills.

One of the main premises of SB 519 was that an effective and comprehensive federal program existed. This assumption is evident in the two main portions of the law. The first part of the law establishes a siting procedure whereby local governments are the primary decision-making bodies in siting new hazardous waste facilities. The law expressly limits the Colorado Department of Health's authority to issuing only those rules not duplicative of the federal rules. Further, it was concluded that a local decision could not be effective until a U.S. EPA permit was issued. Recent changes and delays in the federal program have raised problems for Colorado's implementation of the first part of SB 519. First, partly because of EPA rule changes and delays, it has become very difficult to site a new hazardous waste facility. Second, EPA changes have created confusion as to the Department of Health's authority to enact rules. For example, if federal standards are currently suspended or delayed but may be reimposed in the future, can the Department of Health act in areas where a void exists in federal law?

The second portion of the law requires the state to establish a state RCRA program by 1983. This time period was intended to allow interested parties to convince the General Assembly that the state did not need such a program. This portion of the law also assumes the adequacy and comprehensive nature of the federal program. The General Assembly viewed the federal program as a "cap" on the stringency of the state program. To implement this belief, the General Assembly mandates that the state program can be "no more

STRINGENT" THAN THE FEDERAL PROGRAM AND THAT, IF THE FEDERAL RULES ARE RELAXED, THE DEPARTMENT OF HEALTH MUST CONFORM TO THE RELAXATION. UNFORTUNATELY, THE EPA HAS ALTERED THE FEDERAL PROGRAM IN AREAS THAT THE COLORADO LEGISLATURE FEEL ARE VITAL TO THE ADEQUACY OF THAT PROGRAM. FOR EXAMPLE, IN RESPONSE TO THE RECENT RELAXATION OF THE BAN ON LIQUID LANDFILLS, THE GENERAL ASSEMBLY PASSED A RESOLUTION MEMORIALIZING THE EPA TO CONTINUE THE BAN. BETWEEN THE RELAXATION OF THE BAN AND THE POSSIBLE CHANGES IN THE FINANCIAL RESPONSIBILITY REQUIREMENTS, SOME LEGISLATORS FEEL THAT THE PROGRAM IS NO LONGER STRICT ENOUGH.

IT COULD BE ARGUED THAT, IF THE STATES DO NOT FEEL THE FEDERAL PROGRAM IS STRICT ENOUGH, THE STATES COULD SIMPLY CHANGE THEIR STATUTORY LANGUAGE. IN RESPONSE I WOULD POINT OUT, THAT 19 STATES HAVE ALREADY CONCLUDED THEIR 1982 LEGISLATIVE SESSIONS, OR DID NOT HAVE A REGULAR LEGISLATIVE SESSION THIS YEAR. ELEVEN MORE STATES LIKE COLORADO ARE IN THE FINAL DAYS OF THEIR SESSION. THUS IF ANYONE OF THESE 30 STATES, WISHES TO CHANGE LANGUAGE IN THEIR EXISTING STATUTES BECAUSE OF EPA'S RECENT REGULATORY BACKSLIDE, THEY WILL NOT BE ABLE TO DO SO UNTIL THE 1983 SESSIONS. SUBSEQUENT REGULATORY CHANGES WOULD NOT LIKELY BE FINALIZED UNTIL THE SUMMER OR FALL OF 1983.

IN ADDITION, IN THIS PERIOD OF HIGH UNEMPLOYMENT AND CALL FOR REGULATORY REFORM, THE REGULATED COMMUNITIES' ARGUMENTS OF HIGH COMPLIANCE COSTS AND BEING PLACED AT A COMPETITIVE DISADVANTAGE, CARRY GREAT WEIGHT. THE PRACTICAL POLITICAL RESULT IS THAT THE MINIMUM FEDERAL REQUIREMENTS HAVE OFTEN BECOME THE MAXIMUM STATE REQUIREMENTS, EVEN IN THOSE STATES THAT HAVE TRADITIONALLY HAD MORE

STRICT ENVIRONMENTAL LAWS.

WISCONSIN HAS ALWAYS INTERPRETED RCRA AND OTHER FEDERAL ENVIRONMENTAL LAWS AS DESIGNED TO PROVIDE IMPLEMENTATION FLEXIBILITY FOR THE STATE. IN CURRENT DEBATE ON 1981 ASSEMBLY BILL 936, THE LEGISLATURE IS FACING THE REGULATED COMMUNITY'S ARGUMENT THAT THE STATE PROGRAM SHOULD BE IDENTICAL TO THE FEDERAL PROGRAM. FOR EXAMPLE, THE 1978 WISCONSIN LAW GAVE THE STATE FLEXIBILITY IN ITS LISTING OF HAZARDOUS WASTES. DURING NEGOTIATIONS ON AB 936, A COMPROMISE WAS STRUCK WHEREBY THE STATE LIST OF HAZARDOUS WASTES WOULD BE IDENTICAL TO THE FEDERAL LIST. PERSONS CONNECTED WITH DEVELOPING THE BILL BELIEVE THAT THIS TYPE OF COMPROMISE ALSO WOULD HAVE HAPPENED TO THE FINANCIAL RESPONSIBILITY MECHANISMS PROPOSED IN THE BILL, HAD THE FEDERAL GOVERNMENT PUBLISHED THEIR OWN FINANCIAL ASSURANCE REGULATIONS IN TIME FOR NEGOTIATIONS ON THE BILL.

IN SUMMARY, MR. CHAIRMAN, NCSL BELIEVES THAT THE RESOURCES CONSERVATION AND RECOVERY ACT IS SOUND AND ESSENTIAL. OUR CONCERNS DO NOT LIE WITH THE GOALS AND OBJECTIVES OR WITH THE PROVISIONS OF THE EXISTING ACT, BUT WITH THE MANNER OF ITS IMPLEMENTATION BY EPA.

WE URGE THE COMMITTEE TO TAKE THE NECESSARY ACTION TO INSURE THAT EPA DEVELOPS A STRONG AND TECHNICALLY SOUND FEDERAL PROGRAM. IF FEDERAL REQUIREMENTS SUCH AS OWNER/OPERATOR FINANCIAL LIABILITY INSURANCE REGULATIONS ARE NOT PROMULGATED, LEGISLATURES MAY BE FORCED TO REEXAMINE WASTE MANAGEMENT AUTHORIZING STATUTES, RESULTING IN FURTHER REGULATORY DELAYS AT THE STATE LEVEL.

IN CLOSING, I WOULD LIKE TO THANK YOU FOR THE OPPORTUNITY TO EXPRESS OUR VIEWS ON THE RESOURCES CONSERVATION AND RECOVERY ACT AND WOULD BE PLEASED TO ANSWER ANY QUESTIONS.

STATEMENT OF NORMAN H. NOSENCHUCK, P.E.
DIRECTOR, DIVISION OF SOLID WASTE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

IN HIS CAPACITY AS PRESIDENT OF THE ASSOCIATION OF STATE AND TERRITORIAL SOLID WASTE MANAGEMENT OFFICIALS

BEFORE THE
SENATE ENVIRONMENTAL POLLUTION SUBCOMMITTEE
ENVIRONMENT AND PUBLIC WORKS COMMITTEE
UNITED STATES SENATE

WASHINGTON, D.C. 20510
APRIL 26, 1982

Thank you Mr. Chairman and Senators for inviting me to testify today. I am pleased to respond to your request to examine the hazardous and solid waste management provisions of the Resource Conservation and Recovery Act (RCRA). I am testifying as President of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO). I am the Director of the Division of Solid Waste for the New York State Department of Environmental Conservation. As Director of the Division of Solid Waste in New York State, I am responsible for the State non-hazardous and hazardous waste management programs, including Superfund-related activities.

The enactment of the Resource Conservation and Recovery Act in 1976 (PL-94-580) -- RCRA -- was heralded at the time as a major step toward resolving many of the solid waste management problems facing all levels of government in the nation. Congress found that hazardous and non-hazardous waste has a tremendous impact on our public health, welfare and environment as well as on supplies of materials and energy. In spite of its value as a natural resource, the land is still the final repository of most hazardous and non-hazardous wastes either in open dumps or in sanitary landfills, and the nation is running out of suitable non-hazardous and hazardous waste disposal sites.

The emphasis in current proposed EPA regulations on landfilling creates too much uncertainty for other disposal methods (e.g., destruction and detoxification) and contributes to insufficient alternatives being developed for protection of the public health and the environment.

We must reverse the previous practice which has prevailed throughout our nation's history -- the practice of disposing of non-hazardous and hazardous waste in the cheapest and easiest way possible without concern for the public health and the environment.

Public health, welfare and the environment can be placed in jeopardy without careful planning and management of the disposal of non-hazardous and hazardous solid waste. More stringent air and water pollution control measures have resulted in greater amounts of sludges and residues requiring disposal, while inadequate or unsound non-hazardous and hazardous waste disposal practices contribute to increases in air and water pollution problems. In addition, solid waste represents a vast reserve of materials and energy that can be recovered or conserved, thereby reducing United States dependence on foreign resources.

Congress has recognized that solid waste management problems and issues transcend State and local government boundaries and that adequate financial and technical assistance to the States is necessary to accomplish RCRA goals of protecting public health, public welfare and the environment and to conserve valuable material and energy resources. The objectives of RCRA include provisions of technical and financial assistance to State and local governments for the development of solid waste management plans -- the key to promoting improved non-hazardous and hazardous waste management techniques; promotion of the demonstration, construction and application of environmentally sound resource recovery and solid waste management techniques; and establishment of a cooperative effort among the Federal, State and local governments and private enterprise to recover valuable materials and energy from solid waste.

When Federal assistance to the States, under Subtitle D of RCRA, was terminated on September 30, 1981, the States were left holding the bag, as far as the State non-hazardous solid waste management programs were concerned.

Additionally, with the current proposed sixteen percent Federal budget cut for assistance to States under Subtitle C, Section 3011, from 41.7 million dollars to 35.1 million dollars, we have found that at least ten States will consider withdrawing from the RCRA hazardous waste management program.

It is of interest to note that Congress, under the Solid Waste Disposal Act Amendments of 1980 (PL-96-482), added a new Section 3012 to RCRA, requiring each State to undertake a continuing program to compile, publish, and submit to the EPA Administrator an inventory describing the location of each site within such State at which hazardous waste has at any time been stored or disposed of.

Congress authorized 20 million dollars to be appropriated to carry out this section of the law. No money, to date, has ever been made available to the States for this necessary work.

The Superfund program is limping along. We are one and one-third years into this program since the authorizing legislation was enacted into law on December 11, 1980. EPA's record of accomplishment under this program, through last month, only shows removal actions at 54 sites totaling 19.8 million dollars and remedial actions initiated at 37 sites, totaling 34.1 million dollars. I am concerned that at this slow rate of accomplishment, the $1.6 billion envisioned by the Congress for the clean-up of hazardous waste sites will not be spent. As you know, Mr. Chairman, Superfund has a limited life.

Let's examine some of these concerns in greater detail.

The assistance funds provided previously under RCRA Subtitle D allowed many States to identify and categorize their individual solid waste problem areas and to begin to develop their non-hazardous and hazardous solid waste management plans for the correction of these problems. When RCRA Subtitle D funding was phased out, many corrective State solid waste planning activities could not be implemented, resulting in the continuation of existing problems. The national open dump inventory has been far more costly and time consuming than originally anticipated -- and is still not complete. The States have not been able to provide the funding necessary to carry out the management activities necessary to complete the open dump inventory, and to phase out or bring up to compliance those open dumps that failed the criteria for good operating sanitary landfills.

This is really deplorable. We believe that as a result of the small hazardous waste generator exemption regulations under Subtitle C of RCRA, unmanifested hazardous wastes are being routed to private and public landfills that are open dumps. Serious consequences -- such as pollution of the soil, surface water and groundwater -- could be the result of not phasing out or upgrading these open dumps.

The draft national groundwater strategy is predicated upon a strong non-hazardous and hazardous waste management regulatory program.

In New York State we were only able to classify about one-third of the State's 530 municipal landfills under the Open Dump Inventory. The results of the inventory are much as we had expected: Unlined disposal sites situated on permeable soils, or in wetlands, or close to bedrock almost invariably contaminate groundwater with solid waste pollutants. Federal termination of the Subtitle D program meant the end of New York's Open Dump Inventory -- and a drastic curtailment of our non-hazardous solid waste management program.

Within Section 4008, Subtitle D of RCRA, as amended by the Solid Waste Disposal Act Amendments of 1980, there are two sub-sections which authorize appropriations for Federal grant programs between fiscal years 1981 and 1986 to support State and local agencies for energy and materials conservation recover planning. Section 4008(a)(3)(A) authorizes $4 million annually between fiscal years 1981 and 1986 for grants to State governments for energy and materials recovery feasibility planning consistent with the provisions of Section 4003(b). Section 4008(f)(2) authorizes $8 million annually between fiscal years 1981 and 1986 for grants to local or regional agencies for energy and materials conservation and recovery planning activities described in Sections 4008(b)(1)(A) and (B). These two grant programs, which should be funded, would encourage State and local efforts to maximize recovery and reuse of energy and materials contained in solid waste.

Section 4008(f)(4), Subtitle D of RCRA, as amended by the Used Oil Recycling Act of 1980, authorized $5 million in appropriations for both fiscal years 1982 and 1983 to support State recycled oil programs. Grants would be made to States which include provisions encouraging use of recycled oil within their State Solid Waste Management Plans developed in accordance with Section 4003. This grant program should be funded.

State and local governments have not been able to successfully assume the RCRA Subtitle D solid waste management and resource recovery activities. We have found, in a recent telephone survey of the ASTSWMO membership, that the Open Dump Inventory has been halted in most States that did not complete it, enforcement of non-hazardous solid waste regulations has been slowed, surveillance of landfills has decreased, and user fees have not been used to replace lost Federal funds.

State hazardous waste management programs are adversely impacted because of: decreasing Federal financial support; changing EPA regulations (e.g., EPA's proposal to suspend the ban on the burial of toxic liquids in landfill disposal areas); and, further delays in the promulgation of the remaining RCRA regulations;

States have framed authorizing legislation for their hazardous waste management programs in one of three ways. In some States, the hazardous waste program must be "consistent and equivalent" with the Federal program. In others, the State statute requires that the program be "no more stringent than" the Federal program. In the remaining States, statutory language requires that the State programs be "at least as strict as" the Federal program.

Recent changes and delays in implementing the Federal hazardous waste management program have led to technical, legal and political problems in the States, regardless of how the statutes are worded. West Virginia is an example of a State that depended upon the adequacy of the Federal program when it wrote its statute. The statute requires the State program to be "consistent and equivalent" with the Federal regulations. Additionally, language was included that requires the State to make revisions in their program as the EPA makes revisions in its regulations. These two requirements and numerous changes at the Federal level have caused many problems for the State in writing its regulations.

The regulated community in West Virginia, in commenting on proposed State regulations, has argued that, when there is an absence of Federal regulation due to suspensions, modifications or delays in effective dates, the State cannot regulate in that area. They argue that State regulation in these areas would be inconsistent with the Federal program.

For example, West Virginia is being challenged for proposing financial responsibility requirements for hazardous waste facility operators because the Federal government delayed the effective data of those requirements. Thus, every time a void in regulatory coverage is created by a shift in Federal policy, the State will be challenged on the appropriateness of State action in that particular area. If this type of argument is upheld in the courts, West Virginia will have to wait until Federal policy is established in order to even propose regulations.

States with "no more stringent" language in their statutes have a unique problem in dealing with the Federal program. They too depended on the adequacy of the Federal program. For example, Colorado, which uses "no more stringent" language, is just now beginning to develop hazardous waste regulations. News of recent changes in the EPA regulatory program has led Colorado legislators to think about repealing the "no more stringent" language in their statute. Between the EPA's proposed relaxation of the ban on liquids in landfills and the prospects of changes in the financial responsibility requirements, some legislators feel that the

the Federal program is not longer strict enough. Just last week the Colorado General Assembly passed a resolution memorializing EPA to continue its ban on liquids in landfills.

Let me provide you with an example of how one State has reacted to the recent shifts in EPA policy. Massachusetts was one of the first States to address the problem of siting new hazardous waste facilities head on. The legislature adopted not only an innovative siting procedure, but also specified that RCRA regulations should be considered as minimum standards. However, the same legislator who sponsored the siting legislation has now introduced a measure which would impose a five year moratorium on the siting of any new hazardous waste facilities within the State. The underlying reason for introduction of this measure is the recent shifts in EPA policy. In particular, he is concerned with proposed EPA funding cutbacks, the lack of incinerator standards, and the relaxation of the ban on liquids in landfills. While the fate of that particular bill is uncertain, its introduction serves to point out that public officials take seriously their responsibility to provide for the protection of public health and safety.

Conceptually, the President's "New Federalism" program is a good idea. Returning responsibility for program implementation to the States with a concurrent phase-out and elimination of the Federal role makes sense. Years of State experience and State resources could be effectively utilized to address unique State concerns and to implement hazardous waste management programs that reflect State priorities.

The reality of the "New Federalism," however, is another story. The States were not full partners with EPA in the development of the RCRA regulations that they are now being asked to implement. More dollars are needed rather than fewer dollars to take on the new State hazardous waste management responsibilities under Subtitle C of RCRA. Federal financial assistance continues to be the key to a State's ability to establish and maintain a viable State hazardous waste management program. If sufficient resources are not available, States may return certain responsibilities to the Federal Government.

A recent EPA policy strategy document, Coping With the FY 1983 Budget Reductions in EPA's Categorical Grants, states: "The true cost of implementing Phase II of the hazardous waste program is unknown. The risk of States refusing or returning programs to EPA as a result of the FY 83 budget cuts is greatest in the Hazardous Waste and Underground Injection Control Programs."

I recently spoke to State officials in California and Texas concerning their RCRA programs. I was advised that the Texas Legislature makes it a policy not to replace Federal program funds with State funds -- when the Federal program is drying up. The California State official who I spoke with told me that California is having fiscal problems -- and they might reconsider their involvement in the RCRA hazardous waste management program.

In New York State, when we submitted our Application for Phase I Interim Authorization to conduct the State's hazardous waste management program, we stated: "The work plan contemplated by this application is ambitious. It is based on the assumption that sufficient funding will be available from the Federal government. Any reduction in this funding level will necessitate a corresponding reduction in regulatory capabilities, requiring renegotiation of the work plan."

The proposed sixteen percent reduction in Subtitle C funding represents a loss in excess of $400,000 in Federal funds to New York State for our regulatory effort -- from about $2.34 million to about $1.92 million. We believe that it is unrealistic to expect that New York State can replace with State taxpayer's funds the Federal assistance we had expected for the State hazardous waste management program. In the face of disappearing Federal program support, therefore, I recommended last month that New York State withdraw its application for Phase I Interim Authorization.

As I said earlier, when we surveyed our ASTSWMO membership, we found that at least ten States would withdraw or consider withdrawing from the RCRA hazardous waste management program -- and establish separate State programs -- if Federal assistance under Subtitle C would be reduced. Actually, we found that Federal assistance must be continued and increased under Subtitle C to $60 million for fiscal year 1983, $80 million for fiscal year 1984 and $100 million for fiscal year 1985 for State-to-State program consistency and to provide for protection of the public health and the environment.

The Environmental Protection Agency must initiate a continuing dialogue with the States. Our wealth of experience and resources would hasten the regulatory development process and make the regulations reflect real-world problems. In addition, minimum Federal technology performance standards and criteria should be established with State cooperation. Facility regulations, several years overdue, are yet to be proposed. Consistency in permitting of facilities State-to-State is dubious and ambiguous. The way we are going now, duplicative efforts at the State and Feceral level, and thus wasted expenditures, cannot be avoided.

Laboratory measurement needs for waste characterization and monitoring of facilities, for example, is a critical unmet need. ASTSWMO's State Measurement Needs Study, performed for the National Bureau of Standards (NBS), clearly shows the need for accelerated research and development for laboratory and field test methods and procedures. Without this, formulation of a standard RCRA quality assurance program cannot be achieved. Without health effects research (which has been drastically cut for FY 82 and FY 83), States will not be able to comply with RCRA measurement requirements. And there are other critical areas. EPA must conduct a comprehensive research and development program for hazardous waste management. That is a proper Federal function. The States do not have adequate staff nor resources to implement such research and development programs.

ASTSWMO continues to work at developing a viable Federal/State partnership.

In pursuing this Federal/State partnership and in an attempt to formulate an enforceable and technically sound, publicly acceptable national hazardous waste management program, ASTSWMO has submitted an unsolicited grant proposal to EPA's Office of Policy and Resource Management. The States, in implementing their programs, realize the need for legally defensible data and the formulation of a policy which reflects the varying hazard potential of waste materials. If there are cooperative efforts by EPA, the States, industry and the public, ASTSWMO believes a regulatory framework classifying wastes according to their hazard potential can be developed and implemented within the current RCRA framework. Dialogue with the States, moreover, will be the most effective tool in formulating sound technical policy and, subsequently, enforceable and publicly acceptable regulations. In addition, ASTSWMO is assured that such a study will produce for EPA an efficient and equitable authorization process of State programs equivalent to the Federal RCRA program and consistent among States, thus meeting RCRA's Congressional intent. I have included for the record, Mr. Chairman, letters of support from the States for incorporating a degree of hazard approach in current waste management practices. Our full study has the following objectives:

1) Evaluation of current State laws and regulations to determine consistency among States and substantive deficiencies in terms of promulgated or proposed regulations under Subtitle C of RCRA;
2) Analysis of State insurance requirements;
3) Collection and evaluation of existing data on hazard criteria;
4) Review and analysis of existing testing methods for assessing degree of hazard;
5) Recommendation of degree of hazard classification of wastes based on existing data, waste profiles, and testing procedures;

6) Recommendation of a technically feasible and cost-effective implementation procedure for achieving a nationally uniform State-managed RCRA Subtitle C program protecting human health and the environment;
7) Assessment of State institutional barriers to the implementation of the proposed procedure;
8) Assessment of economic methodologies and consequences of selected implementation procedures; and,
9) Identification and prioritization of needs required for the selected implementation procedure.

ASTSWMO has been privileged to review the Office of Technology Assessment's (OTA) system presented to you earlier today. We believe that the OTA system offers the potential for an appropriate State/Federal partnership that also promotes cost-effective and innovative technologies to solve the hazardous waste problem. We believe that the study we want to perform for EPA could build on this type of management system.

Section 3012 of RCRA states that if the United States Environmental Protection Agency (USEPA) determines that any State hazardous waste inventory is not adequately providing information respecting the sites in any particular State, EPA is required to carry out the hazardous waste site inventory program in such State. The States are not doing this work -- no money available. EPA has not done this work -- even though this information is needed to determine the national extent of this problem.

Clearly, if we are ever going to develop an adequate national priority list of 400 sites for remedial action under the Superfund program, we need a list of all of those sites in the nation where hazardous wastes have at any time been stored or dispose of. If cleanup of sites that are releasing hazardous substances, pollutants and contaminants which are a danger to public health, welfare or the environment is an important national priority -- why haven't continuing State hazardous waste site inventories been undertaken? Why wasn't the $20 million authorized under Section 3012 made available for this work by the States?

Regrettably, it appears that the only time environmental protection is provided for the American public is when an environmental crisis is at hand. Visible water pollution throughout the nation generated pressure in the 1950's to increase public and private abatement efforts under the Water Pollution Control Act. Specific episodes of illness and death related to air pollution aroused both public and scientific concerns about the nature of air contaminants, their transport and means of control in the early 1960's. Love Canal in 1978 aroused public awareness in connection with the improper disposal of hazardous wastes. There hasn't been, to date, a major environmental crisis arousing concern for the non-hazardous solid waste management program. However, like Mt. St. Helens before it blew -- the problem is there -- and the pressures are building. Do we have to wait for the eruption?

So far, under the current scenario of diminishing Federal assistance, I do not see a national commitment to State RCRA Subtitle C hazardous waste management programs, nor a national commitment to State non-hazardous waste management programs. I see laws, rules and regulations that will not be effectively implemented in the near future. I see States returning their RCRA hazardous waste Management programs to the Federal Government, and with their remaining available resources, reprioritizing their hazardous and non-hazardous waste management activities to maintain protection of the public health and environment within their particular States. As a result, I see the Federal Government being asked to enforce the RCRA requirements in various States. Where will these Federal funds come from? Let's not kid ourselves -- RCRA is in serious trouble.

I submit, Mr. Chairman, if the States are given added program responsibility under RCRA -- more, not less, dollars are required.

The time has come, Mr. Chairman, for Congress to reexamine the national committment to promote effective State non-hazardous and hazardous waste management programs under the Resource Conservation and Recovery Act.

[From the Albany, N.Y., Knickerbocker News, Apr. 21, 1982]

ENCON: STATE CAN'T AFFORD RESPONSIBILITY FOR WASTES

(By Andy Danzo, Knickerbocker News reporter)

New York is one of 10 states that may refuse to take responsibility for hazardous wastes from the federal government because aid cuts by the Reagan administration have made it unaffordable, state officials said.

State Department of Environmental Conservation Commissioner Robert Flacke testified Tuesday at a legislative hearing his department is financially strapped and may not be able to take on additional responsibilities.

New York has been negotiating for more than two years with the Environmental Protection Agency to take responsibility for hazardous waste regulations originally enforced by the federal government.

"We're enforcing to the best of our ability what's on the books," Flacke said outside the hearing. "Now we're faced with what they (EPA) want, but they don't want to pay for it."

Under the six-year-old federal Resource Conservation and Recovery Act, states have the option of taking over hazardous waste regulation from the EPA.

But EnCon solid waste director Norman Nosenchuck will testify today at a Congressional hearing that New York and nine other states that had planned to write and enforce their own regulations are now considering backing out.

Nosenchuck, also president of the Association of State and Territorial Solid Waste Management Officials, already has recommended New York refuse to take any more responsibility if more aid isn't forthcoming.

"Not only is the federal government decreasing the federal program support, but they're asking the states to do additional work," he said. "That's crazy."

Nosenchuck will testify that instead of cutbacks, the EPA should almost triple its hazardous waste aid to states over the next three years to $100 million, according to EnCon spokesman Sloan O'Donnell.

EPA's 1983 aid package to New York for the program has been reduced from this year's allocation of $2.34 million to $1.97 million, according to agency spokesman James Marshall.

Flacke said if the state took responsibility for hazardous waste, it would cost $8 million during the next three years.

"The total program is in jeopardy," Flacke testified before the state Senate Toxic Substances and Chemical Wastes Subcommittee. "We need dollars. And to say the program can be run without dollars, it can't be done."

He said EnCon will decide in two to three weeks whether it will abandon the program.

If that happened EnCon and EPA would have to begin new negotiations over what hazardous waste laws will be enforced in New York, Nosenchuck said.

The state's existing law requiring detailed documentation of hazardous wastes by businesses would probably remain intact, he said, but EPA would probably remain responsible for other aspects.

Marshall said it was never the federal government's intent to pay for hazardous waste regulation, and it is less likely to do so under the Reagan administration's "New Federalism" approach of giving more authority to states.

"EPA and the federal government believe states with hazardous waste problems should assume responsibility," he said. "We don't think it's unreasonable at all."

He conceded that states aren't required by law to do that though, adding "EPA doesn't have the resources to have detailed regulations of hazardous wastes."

There are about 4,650 firms in New York that generate, transport or dispose of hazardous wastes, O'Donnell said. According to the latest figures, 1.36 million tons of wastes are generated in the state annually, with 400,000 either improperly disposed or shipped out of state, he said.

STATE OF WASHINGTON

DEGREE OF HAZARD APPROACH TO DESIGNATING AND REGULATING HAZARDOUS WASTES

April 23, 1982

The State of Washington has been using a degree-of hazard approach to designating and controlling hazardous wastes since 1976. The legislation set out to answer the question "What is a hazard" and in particular how to protect hazardous waste generators, treaters and the environment around local landfills from a bewildering variety of toxic and deleterious wastes. The State of Washington Hazardous Waste Act of 1976 defined two classes of waste: (1) extremely hazardous waste and (2) dangerous waste.

The Department of Ecology regulation writers proceeded to define hazardous waste guided by the following principals:

- Keep it simple. Use existing chemical information about waste toxic constituents to estimate biological hazards where such toxicity information was available. Otherwise use simple established biological screening tests such as fish or rat acute bioassays.

- Borrow from existing hazardous materials definitions. Use definition from the United Nations, EPA spill of hazardous substances (from Section 311 of the Clean Water Act) U.S. Department of Transportation 49 CFR regulation, and the Federal Insecticide Fungicide and Roedenticide Act regulations, especially for corrosive, reactive, flammable and acutely toxic properties.

- Address Waste Mixtures. Since most of the waste streams are uncharacterized mixtures, and not pure substances, it is important to use risk assessment methods to designate waste mixtures. Develop a rationale for establishing threshold quantities and concentrations that protect the local sanitary landfill, while avoiding the over-regulation of innocuous waste mixtures.

- Regulate Persistent Bioaccumulative Substances As A Class (Such as chlorinated hydrocarbons). Persistent bioaccumulative substances in wastes are a hazard because they persist in a landfill and present chronic hazards many years after disposal. Develop simple screening tests that regulate these substances as a class and not compound-by-compound which is too limiting for the wide spectrum of compounds produced by generators.

- Use Lists Sparingly. A list is only as good as the criteria and data used to develop the list in the first place. Lists appear to be a simple means of defining hazards but without clear criteria to back them up, they are a regulatory jungle. They are most useful for the small generator who cannot affort proper testing of this waste.

The State of Washington carries the degree-of-hazard designation scheme to facility and siting standards. Less stringent standards are required for lower risk wastes. This is the powerful advantage in using degree-of-hazard in the designation system. State law allows disposal of extremely hazardous waste at only one site in the state (not developed at this time) or at two regional sites out-of-state.

The key to intelligent facility standards is the designation of hazardous waste; if designation is done poorly then the rest of the regulatory system is crippled. The State of Washington emphasized this point when staff first met with EPA regulation writers in 1977, and in written comments ever since. Despite industrial pressures to abandon the degree-of-hazard approach, the State of Washington has integrated it with EPA lists and characteristics to meet requirements of equivalency and stringency in the Federal Act. We hope our successful experience with the degree of hazard approach will lead to its broader application on a national scale.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 27 1982

OFFICE OF
POLICY AND RESOURCE MANAGEMENT

Mr. Jack M. McMillan, Chairman
Hazardous Waste Mitigation Committee
Association of State and Territorial
Solid Waste Management Officials
444 North Capital Street (Suite 375)
Washington, D.C. 20001

Dear Jack:

Thank you for sending the Association's revised grant proposal of December 18 on "Level of Control for Hazardous Materials," following up on the promise which you and your colleagues made in our meeting of December 3.

While we are not yet prepared to give you precise feedback on which elements of your December 18 proposal warrant expansion and which ones should be contracted, nor on the precise dollar figure at which we would prefer to consider funding of the grant, I do want to let you know that the Office of Policy and Resource Management--at the direction of the Administrator--does intend to fund the grant in some form.

We need to go through a couple of more iterations on exactly what ASTSWMO proposes to do, what you will deliver to us, and what EPA is willing to pay for it. We are committed, however, to the notion that there should be an ASTSWMO grant, and that your Committee--on behalf of the Governors whom you represent--should be partners with us in the structuring of the RCRA program regulations. That is the way the RCRA regulation-drafting process should have worked from the beginning, and that is the way we ought to be running all of the Agency's regulation development.

I look forward to a rapid series of negotiations which will lead us to closure on exactly what we will expect of one another, and at what price.

Look forward to meeting with you again.

Sincerely,

Joseph A. Cannon RT

Joseph A. Cannon
Acting Associate Administrator for
Policy and Resource Management

cc: N. Nosenchuck
R. Valentinetti
J. Rams

Association of State and Territorial Solid Waste Management Officials
444 North Capitol Street, N.W. • Washington, D.C. 20001 • 202-624-5828

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Mr. Joseph A. Cannon
Acting Associate Administrator
for Policy & Resource Management
U.S. Environmental Protection Agency
401 M Street, S.W. (PM-219)
Washington, D.C. 20460

Dear Mr. Cannon:

Re: ASTSWMO December 18, 1981 Grant Proposal
on "Level of Control for Hazardous Materials"

Thank you for your January 27 letter to Mr. Jack M. McMillan, Chairman of our Hazardous Waste Mitigation Committee, in connection with the subject matter.

We appreciate the commitment by the Administrator and yourself to the notion that there should be an ASTSWMO grant, and that our Association should be partners with EPA in the structuring of the RCRA program regulations.

Jack McMillan, Dick Valentinetti and myself will be meeting with Mr. Richard Tropp of your office on Friday, February 5, to begin the "rapid series of negotiations which will lead us to closure on exactly what we will expect of one another, and at what price."

Thanks again.

Sincerely,

Norman H. Nosenchuck

Norman H. Nosenchuck, P.E.
President
ASTSWMO

cc: Jack M. McMillan
Richard A. Valentinetti
Jacqueline M. Rams
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STATEMENT OF

MR. KENNETH F. PAYNE, EXECUTIVE DIRECTOR

RHODE ISLAND LEAGUE OF CITIES AND TOWNS

on behalf of

THE NATIONAL LEAGUE OF CITIES

on

THE RESOURCE CONSERVATION AND RECOVERY ACT

before

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

April 26, 1982

STATEMENT
OF
KENNETH F. PAYNE, EXECUTIVE DIRECTOR,
RHODE ISLAND LEAGUE OF CITIES AND TOWNS
FOR THE
NATIONAL LEAGUE OF CITIES

APRIL 26, 1982

My name is Kenneth F. Payne. I am executive director of the Rhode Island League of Cities and Towns, 128 North Main Street, Providence, Rhode Island. The Rhode Island League of Cities and Towns is the membership organization of Rhode Island local government. I served as a director of the National League of Cities from November, 1979 through November, 1981. I am also testifying on behalf of the National League of Cities.

Today I will first address our concerns regarding funding and implementation of the goals of the Resource Conservation and Recovery Act. I will then discuss implementation of RCRA in Rhode Island.

NLC has already testified before this committee regarding the administration's fiscal year 1983 budget for the EPA. I would like to briefly reiterate some of our concerns regarding funding under RCRA.

Congress intended RCRA to be implemented, in large part, by states and local communities, and laid out a plan to develop their capabilities in this area. The administration's budget cuts, both in '82 and '83, have made it much more difficult to achieve the objectives established by the Congress.

When grants to the states for solid waste planning were eliminated last year, no state plan had been approved by EPA, and the open dump inventory mandated by RCRA was not complete. According to the GAO, the open dump inventory, finally published by EPA in May 1981, is incomplete and will not fulfill the purpose for which it was intended by Congress. The published inventory listed only 1,209 open dumps in the Nation. States are aware of thousands of other open dumps--it is estimated that Louisiana alone has over 1,700--but without federal funding it is unlikely that states will continue to update the list. Furthermore, EPA staff capability in this area is being phased down.

Although 38 states have now submitted solid waste plans to EPA for approval, as of a week ago, only 18 plans had been approved. Even if EPA continues to review these plans, surveys show that most states will be unable to implement them. The elimination of grant funds occurred three years earlier than originally expected. User fees, which could provide an alternative funding source for state programs, are not in place in most states. Many state agencies are expressly prohibited by state statute from charging fees, and the resistance from disposer groups required to pay fees will be politically difficult to overcome. In the meantime, there will be new open dumps and existing ones will not be closed or upgraded.

It would be foolish to eliminate the necessary financial assistance on the threshold of completing the basic goals of RCRA. Each state should at least assess its open dumps and hazardous waste sites and set forth a plan on statewide management of wastes.

These goals can be met. The American people are increasingly concerned with the dangers of waste disposal. The consequences from a failure to address these problems are enormous.

I would like to submit for the record a very reasonable letter from an Ohio resident regarding these concerns. This letter indicates the very basic questions that must be answered.

Voice of the people

Many concerns on PPG proposal

I AM a resident of Norton and a member of Citizens Opposed to the Destruction of the Environment. Along with other Norton residents, I am very concerned about PPG's proposal to store hazardous waste in its mine in Norton.

I understand the American people want the products which produce hazardous wastes and I realize we must have a safe manner of disposing of these hazardous wastes. I don't know if the mine is the answer. There are no guarantees. There is much more involved than just the mine.

The mine is under our homes, our only park facility and our only shopping complex.

The mine is 1,000 feet from our grade schools and high school. We only have a volunteer fire department.

Our right to decide whether or not hazardous waste can be disposed of in our community has been pre-empted by the passage of Senate Bill 269. We can't impose regulations on PPC if the mine would go through. I wonder how many other communities are aware that their rights have been taken away, too.

We're concerned about the trucks going through our neighborhoods and what will happen once they arrive at the mine site. Can we trust companies to ship what they're supposed to? Can we believe that PPG is going to adequately test the shipments to be certain they contain the materials they're supposed to contain?

Will there be stiff regulations? Will they be checked by the Environmental Protection Agency regularly?

The EPA does not have a very impressive record and with President Reagan's budget cuts there may not even be an EPA.

What will be the long-term effect on the area from storage of this tremendous volume of hazardous materials? We have to think of our children and our grandchildren.

What if something tragic happens and jeopardizes the people in our community? Then, will something be done? There are too many unanswered questions and too many innocent people.

I don't think it's just a Norton problem. Disposal of hazardous wastes, since we all benefit from the products that make hazardous wastes, should be a national concern. People who wish to learn more should come to our meeting at 7:30 tonight at Norton High gym.

L. L. GOSTLIN
Norton

We welcome your letters and the chance to publish as many as possible. Concise, legible letters on current events are the most interesting for other readers. We ask that letters be original and bear the writer's full signature, address and phone number. All letters are subject to editing so that we may publish many views. We withhold names only for good reason.

Please address your letters to Voice of the People, Akron Beacon Journal, Akron, Ohio 44328.

Rhode Island

The State of Rhode Island has established solid waste and hazardous waste programs to implement RCRA. I shall try to answer from a local perspective the question; why, if this the case, is a strong RCRA program still needed at the Federal level.

1. Landfills and Open Dumps. Local landfills are becoming a thing of the past as the means of solid waste disposal. They are being closed because they are environmentally unacceptable or because they are filled to capacity. New landfills are not being opened.

Private landfills that threaten public health and the environment are gradually being shut down as a result of State enforcement actions. The enforcement proceedings are typically protracted and frequently involve litigation.

Since both private, as well as municipal, landfills were often located in parcels of land that were unsuitable for other forms of development, swamps, marshes, and wetlands, their continued operation poses a real threat to the public health and the environment. There are legitimate local concerns about leachate from landfills, ground water contamination, and pollution of drinking water supplies.

Relaxation of the Federal effort could create the unhappy circumstance of having a lower standard applied now and in the future then was applied in the past. Those whose operations were closed would feel the inequity, and those who were expecting the protection of enforcement would be let down.

Even if a State were to continue to attempt to administer a strict program, its efforts would be undercut by the lesser standards in other States. Landfill operators would complain, "Why is it necessary for you to enforce high standards against us, they're required elsewhere, and EPA isn't asking for them.

It is important that through RCRA, EPA continue to buttress state efforts to require proper landfilling.

2. Resource Recovery. A decision to proceed with resource recovery as a means for solid waste disposal is long term and of large magnitude, not recurring. A community does not make the decision every year. Consequently, while general knowledge of resource recovery has increased substantially, localities do not maintain in-house expertise adequate to analyzing resources recovery applications and deciding what is appropriate for the community.

EPA's technical assistance panels and peer matching program have filled a need for expertise at the local level.

Experience is being gained with resource recovery technologies. There is more knowledge to be shared. And if less reliance is to be placed on landfills, there is a continuing need to have it shared.

In Rhode Island, a 1500 ton per day central processing facility for the state's solid waste has been planned. The project has a high capital cost. High interest rates may have pushed the cost of the facility outside the range of acceptability.

At the same time, experience is being gained elsewhere with modular facility technology. Such facilities have lower capital costs, higher operating costs, and somewhat lower efficiencies than the larger, custom-built central processing facilities. However, since modular facilities are smaller, more of them may be build: hauling and transfer costs may be reduced because facilities can be nearer at hand.

There may be opportunities to utilize modular facility technology in Newport, Rhode Island, in conjunction with the Navy base, but the technical assistance support is not available to assess the specific feasibility of such a project.

Resource recovery planning was based on certain capital cost assumptions. The situation has changed dramatically. Projects that seemed feasible when interest rates were seven to nine percent may be out of the question when interest rates are in the twelve to thirteen percent range. Yet the need to find means to dispose of solid waste does not go away because interest rates are high. As a result, there continues to be a need for resource recovery planning.

3. Hazardous Waste Management. Cities and towns have significant direct interest in most aspects of hazardous waste management. Cities and towns are sites of current disposal operations, proper and improper. Cities and towns operate landfills which sometimes receive hazardous wastes. Local industries require adequate hazardous waste disposal arrangements. Cities and towns will be sites for hazardous waste transfer storage, treatment, and disposal facilities.

To accommodate the provision of facilities for the proper handling of hazardous wastes, localities are typically asked to give up local land use control prerogatives. The history of hazardous waste management is so sorry, that people want no more of it; they do not want hazardous waste management facilities in their neighborhood or their community. Yet local political leaders know that something must be done to solve the problem.

Unwaivering commitment is necessary at all levels of government. Local leaders will rightly ask, why should they go to the wall on a controversial issue if state and Federal officials are not standing firm.

Why should localities give up the power to protect themselves from the location of undesirable facilities, if those facilities are not going to solve the hazardous waste management problem. The rationale for accepting the facilities in the face of local opposition is that they will solve the problem. If the commitment to enforcement is inadequate, there is no assurance that the facility will solve the problem; thus slackening of enforcement undercuts the strong argument for facility siting, that hazardous management facilities will solve the hazardous waste disposal problem.

Hazardous waste management is an interstate problem. Interstate shipments of wastes for treatment and disposal are common. The opportunity for unacceptable breakdown in the management system arises as wastes cross jurisdictional boundaries. The adequacy of a State's program affects the quality of management and disposal regulation in other states.

In Rhode Island it has recently been reported that substantially more out-of-state wastes were manifested for disposal site than there is record of it having received. Either more waste was disposed of at the site than was acknowledged or wastes went elsewhere and the site was a "flag of convenience." Public confidence in the integrity of the system of regulation has been strained.

The efforts of states to establish good programs for regulating the generation, transportation treatment, and disposal of hazardous waste will be compromised if the Federal government relaxes its requirements for all states to establish adequate programs.

The strength of individual state programs is a function of the Federal program that assures that there will be adequate, compatible programs in all states.

Treatment of hazardous waste becomes more attractive to industry as the availability for raw disposal diminishes. It is unreasonable to expect industry to demand or localities to offer treatment facility sites when regulations governing land disposal are not stringent.

If the Federal government is willing to tolerate the threat to public health and safety and the environment posed by allowing increased use of landfills for hazardous waste disposal, it is unreasonable to assume that localities will believe that transport and treatment regulations will be enforced to standardsthat will make treatment facilities acceptable to the community.

The Rhode Island League of Cities and Towns has been playing a major role in developing hazardous waste management facility siting legislation for Rhode Island. The League's position is that cities and towns should not have absolute veto power over facilities. On the other hand, the League holds unequivocally that facility siting is but one component of a comprehensive program for effective hazardous waste management, if other components of the program are neglected, the entire program is degraded. Absent a strong Federal program, it is unreasonable to expect there to be strong State and local programs.

Strong commitment to the current initiative, not a new initiative, is what we seek.

National Solid Wastes Management Association
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TELEPHONE (202) 659-4613

EUGENE J. WINGERTER
EXECUTIVE DIRECTOR

Testimony

of

RICHARD L. HANNEMAN

Director
Government and Public Affairs

NATIONAL SOLID WASTES MANAGEMENT ASSOCIATION

regarding

Reuthorization of Implementation of the
Resource Conservation and Recovery Act

before the

Subcommittee on Environmental Pollution
Committee on Environment and Public Works
U.S. Senate

on

April 26, 1982

- COLLECTION COMMITTEE
- INSTITUTE OF CHEMICAL WASTE MANAGEMENT
- INSTITUTE OF RESOURCE RECOVERY
- INSTITUTE OF WASTE EQUIPMENT DISTRIBUTORS
- INSTITUTE OF WASTE TECHNOLOGY
- LANDFILL COMMITTEE
- WASTE EQUIPMENT MANUFACTURERS INSTITUTE

Good morning. My name is Richard L. Hanneman. I am Director of Government and Public Affairs for the National Solid Wastes Management Association, the national trade association representing the waste service industry.

NSWMA represents more than 2,000 private companies engaged in the collection, processing and disposal of solid and hazardous wastes. NSWMA has been involved since the mid-1970s in developing programs responsive to the objectives of now known as the Resource Conservation and Recovery Act (RCRA). We are proud of our long-standing history of cooperation with this committee.

I am here today to review the performance of the U.S. EPA in implementing RCRA and in assessing the progress of the federal hazardous waste management program in particular.

We believe that RCRA should be reauthorized without any basic redirection. In evaluating the effectiveness of our waste management program, we need to ask: Is RCRA working? A secondary question is: Can it be improved? The answer to each question is "yes."

RCRA is Working

While EPA's record has been widely criticized, there is no question that RCRA is moving in the direction of assuring better management of wastes as Congress intended when it was enacted in 1976. Congress felt in enacting RCRA that if it could set high standards for proper management of wastes, those who generate and handle wastes would be required to pay the full costs of dealing with waste management and that managing wastes would become more environmentally sound. The increased costs of complying with the federal regulatory program would result in waste reduction initiatives, resue and recycling efforts, and induce investments in new and proper facilities.

This theory is working, although the progress has been agonizingly slow. Facilities throughout the country, both solid waste and hazardous waste management facilities, are being upgraded. Less wastes are being produced. There are more wastes being treated and recycled with consequentially lower volumes and more dewatered wastes being delivered to our members' facilities. Wastes received at secure landfills declined 10 percent in 1982 from 1980 levels. Conversely, chemical wastes treated prior to disposal increased by 35 per cent. More incineration of hazardous wastes is occurring, particularly on-site (much of it unregulated, however). We project investments in new off-site hazardous waste facilities at $ 2.2 billion over the next five years.

For solid wastes, landfill practices have been greatly improved, but at the same time there has been a surge of interest in resource recovery facilities, especially in large urban areas where landfill capacity is in short supply. Twenty new resource recovery plants, we project, will be built in the next five years with total capital costs of $5.4 billion.

We want to emphasize six specific areas of agency achievement and eight problems which require serious consideration at the agency and perhaps by this committee in its oversight capacity.

Areas of Achievement

First, EPA has become much more adept at listening to all sides of the question, especially seeking good technical input. The emphasis at the

Agency on improving the quality of its "science" is long overdue. Second, EPA deserves high marks for developing a uniform national manifest system, a project which had been shelved for several years following enactment of RCRA. Third, EPA has finally promulgated ultimate standards for hazardous waste management with the exception of land disposal standards. Fourth, EPA has become much better at establishing priorities for use of its scarce resources. Particularly, we support the concentration of EPA resources on behalf of the hazardous waste program and the phasing out of support for such programs as resource recovery. Fifth, EPA acted wisely and well in proceeding to publish financial responsibility regulations operating hazardous waste facilities. Publication on April 16 assures the public that all operators of hazardous waste facilities will be able to meet the financial requirements of properly managing hazardous wastes.

Sixth, EPA has placed a high and proper priority on the problems of siting new waste management facilities. Over the past year we have co-sponsored siting conferences involving public offered; local residents, environmentalist and industry interests in several parts of the country. In this EPA worked in close cooperation with NSWMA, the National Governors Conference, the National Conference of State Legislatures, several industry groups, the National Association of Countries and several environmental groups. This is an appropriate leadership role; the federal government should not attempt to legislate siting itself, more properly a role for state government with local participation.

But EPA also has some problems to overcome and some opportunities which should be capitalized on. Continued progress in successful implementation of a national hazardous waste program depends on timely development of a sound, effective regulatory system. This requires addressing eight areas of concern.

Serious Problems Need Attention

First, regulations have been tardy. This is not a particular indictment of this Administration, but has been a characteristic of the program since it was enacted. The Agency faces an enormous challenge in dealing with the timeliness of its activities. The uncertainties and delays in EPA's standards development program, the missed "drop dead" dates have all had a chilling effect on our industry.

Second and similarly, EPA is not only late, it keeps changing its mind, creating problems for both state government and industry. The state of New Hampshire, the state had a program of "lifetime" permits for waste management facilities. When the state felt that EPA was moving in the direction of a five-year permit, it changed its state laws. Now EPA has gone back to the lifetime permit concept, throwing states into complete confusion. The problems for industry growing out of the uncertainty and delay of EPA programs are primarily in the area of deciding whether to invest funds that will be necessary to build facilities which will, in turn, make RCRA successful. We need to have more lead time and greater confidence that the program is moving in a steady direction.

Third, the quality of the regulations needs attention. Just as NSWMA has argued that it makes no economic sense to require expensive treatment for certain waste managed safely using less expensive technology, so does NSWMA recognize that certain wastes should not be disposed of in the land without treatment. EPA should keep working on its "degree of hazard" system.

NSWMA has long advocated strict regulation of the burning of hazardous waste in all types of devices not merely incinerators as in the existing rules. We filed suit in the U.S. Court of Appeals for the District of Columbia Circuit more than one year ago urging the courts to order EPA to close this loophole. Improper or incomplete burning can yield gaseous or particulate emissions to the atmosphere that may be harmful to health and the environment. Incinerators are only one small class of combustion devices in which wastes are now being burned, others being boilers, kilns and industrial furnaces. EPA, we contend, has the authority to regulate all burning of hazardous wastes and if the Agency fails to exercise this authority promptly, we urge the Congress to mandate that the Agency close this gap in the regulations. We believe that Section 3004 of RCRA requires that all hazardous wastes be brought under Subtitle C regulation. Once such wastes are subject to regulation, then EPA can determine, based on an adequate administrative record, if specific wastes require different types of standards for storage, treatment or disposal.

In a related matter, NSWMA has always opposed exempting hazardous wastes intended for reuse and recycling from RCRA since the environmental and human risks are the same as those when wastes are intended for destruction.

Another qualitative problem is the exemption of so-called "small quantity generators. We continue to be extremely concerned over the impact of the small generator exemption, not on the hazardous waste industry, but on our other constituency, the solid waste industry. Solid waste handlers who unknowingly receive small quantities of hazardous wastes, up to 1.1

tons per month per generator, are unnecessarily exposed to occupational hazards in handling these wastes. Likewise, land disposal and resource recovery facilities designed to receive municipal solid wastes often encounter difficulties in both occupational safety and the environmental character in handling hazardous wastes. On September 12, 1980, NSWMA submitted a rulemaking petition to EPA requesting revision to the reduced RCRA Subtitle C requirements for wastes produced by small quantity generators, and EPA published its notice of the petition on October 15, 1980 (45 FR 68409). Last Wednesday, more than a year and a half after receiving the petition, and without a public hearing to obtain additional public input, the Agency announced in Congressional testimony its intent to deny the petition. We urge Congress to close this small generator exemption loophole by legislating a timetable to eliminate this dangerous exemption. Several states, you should know, already have responded to this threat by enacting tougher state laws closing this exemption as allowed under RCRA.

Our fourth major area of concern is that the permitting process is being unnecessarily and dangerously stretched out. We have been told that it may be fully eight years before all interim status facilities are reviewed. RCRA was enacted 5 1/2 years ago. Of the 10,500 facilities which treat, store or dispose of hazardous wastes only two have final RCRA permits today. It will be at least six full years from enactment before the first hazardous waste disposal facility receives it final RCRA permit, and that's an optimistic estimate. If this is caused by a diversion of Agency resources to regulatory review to reduce the "regulatory burden" on industry, we as a regulated industry strongly urge the Agency to throw more of its resources into permitting and enforcement and less into the providing of "relief."

We urge EPA to call up all Part B applications as soon as final regulations are in place. Once the applications are called, those interim status facilities which cannot meet stringent standards will have to close down.

EPA has said that there are 527 interim status landfills and evidently has based its permitting projections on this figure. We have very strong indications that there may be no more than about 100 on-site and off-site secure landfills which would submit Part B applications for approval. We believe that most of the interim status landfills are very small, too small in which to invest any money for upgrading. The cost of a new 50-acre secure landfill with a double liner, a leachate collection system and the permitting and consulting expenses could be from $10 - 12 million. In addition, about $80,000 would be needed for the closure and post-closure expenses. Using, for a moment, EPA's most grandiose assumption that 60 million tons of hazardous waste is produced annually and assuming that all of that waste were to go into landfills, even then the nation would require nowhere near the 500 - plus facilities EPA says we have todaY. Therefore, we urge EPA to substantially revise its projection of the time it will take to have hazardous waste facilities permitted which meet its final stringent standards.

Since regulations are not yet ready for landfills, we suggest EPA devote resources to a crash effort to permit storage facilities which are much less complicated and time-consuming.

Fifth, EPA needs to be more sensitive to the developing interface between state and federal roles in hazardous waste management. NSWMA strongly supports a continuation of EPA hazardous waste grants to the states so that they can pay the program support costs to implement the federal program. It is also important that EPA exercise greater diligence in assuring that in granting a state's authority to implement the federal program, it is assuring, as Congress intended, that state programs are "equivalent" in both statutory language and program impact. We are concerned over the increasing incidence of discrimination in state programs between on-site facilities and off-site facilities and have great concern about the consistency in applying these rules between the various EPA regions. We urge a stronger headquarters role in policy management.

Sixth, EPA must concentrate its resources more effectively on a strong program of enforcement. We are concerned, however, that the budget seems to direct most the resources within the hazardous waste program to development of standards and not to enforcement. We believe that the standards-setting phase is nearly completed and the resources must now be devoted to the prompt permitting of facilities and the strict enforcement of the regulations. We believe EPA should make the standards for incinerators and surface inpoundments already developed effective immediately for existing facilities as well as new facilities.Enforcement must be even-handed as well, reflecting equal application of regulations to on-site and off-site facilities.

I was on the McNeill-Lehrer Report two months ago with Congressman Florio and Bill Sullivan who, at the time, headed EPA's enforcement program. Although I expressed concern that enforcement inspections were often superficial and might not adequately cover the on-site facilities which manage 80 percent of the wastes, I reported inspections were being made at commercial hazardous waste facilities. In the past two months, even this level of enforcement has all but disappeared.

Seventh, we believe EPA should become a more active advocate for its policies when they are threatened by other actors in the governmental arena. For example, as we discussed earlier, we support the elimination of project-specific grants for resource recovery. But, consistent with the Administration's views that private enterprise be encouraged to invest in waste management facilities, EPA should support the continued eligibility of industrial development bonds and energy tax credits for waste management facilities. EPA should also, in light of the need to concentrate federal government resources in the area of greatest impact, actively encourage the Interstate Commerce Commission to put aside its proposal to assert duplicatory jurisdiction over the industry transportation of hazardous wastes, a responsibility of the Department of Transportation and EPA under the present program.

The eighth, final and very important area of concern which we have for the Agency's performance lies in the area of the credibility of the Agency. Credibility must be earned; there is no right to public confidence. A diminished credibility of EPA undermines industry's efforts. The public needs to have assurance that some responsible and competent authority can independently and objectively determine the safety of waste management facilities. EPA credibility is an important resource that must be husbanded, preserved and conserved. It should not be allowed to diminish to the point where it becomes "endangered."

In conclusion, NSWMA supports a strong and even-handed regulatory program for hazardous waste. We believe in strict and fair enforcement of these regulations. RCRA is working today largely on the basis that some states have strong state regulatory programs and everyone expects that RCRA will continue to work as intended. This is a fragile foundation. No substantial redirection is needed for RCRA and it should be reauthorized this year, to maintain the momentum and program's success.

Hazardous Waste Treatment Council
P.O. Box 57212-0202 • Washington, D.C. 20037

STATEMENT OF RANDY M. MOTT
ON BEHALF OF THE
HAZARDOUS WASTE TREATMENT COUNCIL
BEFORE THE SUBCOMMITTEE
ON ENVIRONMENTAL POLLUTION, OF THE
SENATE COMMITTEE ON ENVIRONMENT AND
PUBLIC WORKS

April 26, 1982

The Hazardous Waste Treatment Council is a trade association of companies engaged in the incineration, detoxification, neutralization and treatment of hazardous wastes. The Council was recently formed to promote the safe and environmentally sound treatment of hazardous waste.

This Subcommittee's consideration of the problem of siting new treatment facilities is one of the most important issues presented under RCRA. The combination of grand-fathering of existing facilities, delays in the development of permitting standards for facilities and public apprehension over any facility has often frustrated the introduction of superior hazardous waste treatment facilities.

The construction and utilization of facilities employing more effective technological alternatives to the hazardous waste disposal problem has lagged behind both environmental needs and potential feasibility. Superior technology that destroys or treats hazardous waste so as to render it innocuous or less hazardous has been implemented and utilized at a far slower rate than it could be under optimal conditions.

Failure to employ superior waste treatment technology has left the United States with a greater reliance on landfills for hazardous waste disposal than other industrialized nations -- a reliance which flies in the face of the consensus that no truly "secure" landfill exists and that many persistent toxic wastes presently being landfilled will outlive their temporary earthen homes by thousands of years.

A long-term shift away from landfilling of inappropriate types of wastes depends upon the siting of new facilities which utilize treatment processes that reduce or eliminate the risks presented by these wastes.

This shift toward superior treatment technology is presently being thwarted by several factors which make siting difficulties even more intractable than they otherwise would be:

First, insufficient financial incentives exist for investment in improved equipment and facilities. With no real restrictions on landfilling being contemplated by EPA, more expensive but also more prudent technology must compete on the basis of disparate economics. Treatment technology cannot compete with the cost of burial of hazardous wastes as long as the cost of disposal does not incorporate the true cost to society.

If landfilling disposal costs included the requirement for maintenance, monitoring and insurance for the toxic life of the waste, then the added costs involved would bring market prices into line with the costs of treatment options. These landfilling costs, however, will not be borne by the private sector until regulations require it. They have yet to do so.

Hazardous waste treatment technology must also compete with completely unregulated practices, such as the burning of wastes in boilers. Because this practice remains exempt from RCRA, about 20 million tons of hazardous waste -- much of it low BTU value toxic material blended with legitimate fuels -- is burnt for "heat recovery" thus placing it outside the RCRA system. The unregulated burning of toxic wastes is projected to grow significantly through 1985 as environmental controls on other disposal and treatment options make it even more attractive economically. In the meantime, we may, in EPA's own words,be incurring "unacceptable levels of risk" from the unregulated use of hazardous waste for "heat recovery." This frustration of competitive economic incentives which results from a lack of regulation promises to prolong our society's reliance on the dangerous disposal practices of the past.

Inconsistent and uncertain regulations and enforcement have heightened public apprehension of new siting proposals.

Jack McMillian, representing the Association of State and Territorial Solid Waste Management Officials stated before 11 March 1982 EPA public hearing: [T]he public is concerned about the subject of land disposal. . . . People do not trust landfills, [and] do not want landfills in their areas. . . ." At the same hearing the League of Women Voters testified that actions taken in disregard of the hazards posed by landfilling can only "further undermine public confidence in the government's ability to manage toxic wastes, and delay efforts to secure sites for environmentally sound treatment. . . ."

Against this background, who could expect companies to invest millions of dollars in new treatment equipment to treat and destroy hazardous wastes? Lacking the financial incentives to risk substantial investments, most companies continue to seek the lowest cost option legally available to them. Existing capacity to treat and destroy hazardous wastes remains underutilized, and new capacity becomes increasingly difficult to justify to shareholders, investors and lenders.

Dr. Samuel Epstein's forthcoming book, Hazardous Waste in America, cogently summarizes this point:

> The greatest disincentive to the improvement of currently available disposal techniques, and to the development and application of resource recovery and a wide range of prototype techniques, is the ease and economy of disposal of hazardous wastes in "secure" landfills. The creation of economic disincentives to "secure" landfill disposal -- to reflect the full range of their currently externalized and delayed societal costs -- and the creation of economic incentives -- including research subsidies -- to other forms of disposal and resource recovery are critically needed to reverse this situation. Implementation of such economic pressures will be facilitated by the recognition that, in general, landfill is the most hazardous and least reliable method of disposal . . . .

The closing of RCRA loopholes, together with measures that restrict landfilling of some particularly toxic and dangerous hazardous wastes and that force the true costs of landfilling to be borne by the landfill user not society, will begin to create the incentives necessary for the development of a viable treatment industry. These same measures would do much to moot siting problems by reducing public apprehension and heightening the incentives to site new facilities.

The Council believes that the market place remains the best means for encouraging the siting of better facilities. This will only occur if each treatment and disposal technology is forced by regulation to fully internalize its costs. Each treatment and disposal option must bear its true cost. They must not be subsidized by ignoring costs which our children will inevitably incur.

ENVIRONMENTAL DEFENSE FUND

TESTIMONY OF

KHRISTINE L. HALL

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE

ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

April 26, 1982

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OFFICES IN: NEW YORK, NY (National Headquarters); WASHINGTON, DC; BERKELEY, CA; DENVER, CO

Mr. Chairman, Members of the Subcommittee, my name is Khristine Hall. I am testifying on behalf of the Environmental Defense Fund (EDF) and its 46,000 members and Environmental Action Foundation. I am an attorney with EDF and Co-chairman of EDF's Toxic Chemicals Program. The goal of the Toxic Chemicals Program is to minimize the non-voluntary exposure of people and the environment to toxic chemicals. It is an unfortunate fact that one of the major routes of such exposure comes from the improper disposal, treatment and handling of hazardous wastes. For this reason the Environmental Defense Fund has closely monitored the implementation of the Resource Conservation and Recovery Act (RCRA) since 1976 and has been an active participant in most major RCRA litigation and rulemakings. Stringent regulation of hazardous waste is a necessity if we are to prevent unnecessary and dangerous exposure to hazardous waste. The events of the past few years demonstrate that the ultimate price of mismanagement of waste is high, both in human and economic terms.

The Resource Conservation and Recovery Act was enacted in 1976 with the goal of creating federal regulations of hazardous waste from its "cradle to grave". Subtitle C of RCRA required the Environmental Protection Agency (EPA) to develop minimum standards to protect human health and the environment and to delegate the implementation of the control effort to states with approved programs. The statute mandated that EPA promulgate the necessary regulations within 18 months of enactment, or April of 1978. Insufficient resources to perform EPA's statutory responsibilities in this area were, however, requested by the Carter Administration.

Since the regulations had not even been proposed by the April, 1978 statutory deadline, EDF and several other organizations filed suit in U.S. District Court seeking promulgation of the regulations. See State of Illinois v. Costle, No. 78-1689 and consolidated cases (D.D.C). Within two months, the Court found EPA to be in violation of the law. From that point in November of 1978 to this day, the efforts of EDF have been directed at encouraging, prodding and cajoling the Agency to comply with RCRA's mandate at the earliest possible date.

In December 1978, EPA proposed a schedule which called for all the hazardous waste regulations be finalized by December 31, 1979. The court adopted this schedule, and also required EPA to file with the court quarterly progress reports. But in June 1979, EPA Administrator Douglas Costle informed the court that he was uncertain whether the December 1979 deadline could be met. By October 1979 no uncertainty remained. In the third quarterly report to the court, EPA proposed a new schedule calling for February and April 1980 deadlines for most of the regulations. In a subsequent letter to the court, EPA proposed a new schedule calling for February and April 1980 deadlines for most of the regulations. In a subsequent letter to the Senate Environment and Public Works Committee, the schedule was again revised to reflect a Fall 1980 deadline for issuance of treatment, storage, and disposal facility standards. Soon thereafter, this revised schedule was adopted by the court.

In February of 1980, the first set of regulations was promulgated. These regulations primarily covered generator and transporter requirements.

In May of 1980, regulations identifying particular wastes as hazardous, minimal requirements for state programs, and the interim status standards for waste management facilities were promulgated.

In January of 1981, final standards for tanks, piles and containers; storage surface impoundments (pits, ponds and lagoons); incinerators; and crucial financial responsibility regulations were issued.

Thus, except for the final standards for landfills, EPA had largely met the second judicially sanctioned schedule for promulgation. The effort encompassed over four years, numerous congressional oversight hearings, thousands of public comments, a series of public hearings and two court orders.

The Carter administration's performance in carrying out its duties under RCRA left much to be desired. The regulations the past administration issued were long overdue and in places too weak to adequately protect public health and the environment. Nonetheless, most of the basic requirements had been put into place by January 1981. In addition, there appeared to be a commitment to move ahead in implementing and enforcing the regulations which had been written.

Since the change of administrations, however, it has become regrettably clear that we are no longer moving forward in protecting public health and the environment from the mismanagement of hazardous waste. In the last year we have witnessed a startling reversal of attitude at EPA concerning protection of the environment and public health from exposure to hazardous wastes. On issue after issue under RCRA, EPA has followed a course of action which places emphasis on deregulation and cost savings to industry at the expense of adequate protection of public health and the environment. Instead of moving forward on hazardous waste issues, we are taking giant steps backward.

To illustrate this point, I'd like to catalog some of the events over the past year concerning EPA's actions under RCRA. Individually, these actions are deplorable in themselves. Taken together, they evidence a concerted effort on the part of EPA to return to the days when hazardous waste disposal was essentially unregulated.

(1) Failure to Promulgate Landfill Regulations. More than five years after passage of the Resource Conservation and Recovery Act, we still do not have final regulations governing landfills. This is despite the fact that landfilling remains the dominant mode of waste disposal in this country. In the absence of state standards, the only requirements for landfilling are contained in the interim status standards promulgated in May 1980. Generally these requirements are precipitation run-on and run-off requirements, wind protection requirements, vague closure requirements and the now-famous ban on drummed liquid waste and ignitable waste. These requirements are clearly not adequate to protect public health and the environment.

While this Administration inherited an unfortunate legacy of delay, it has compounded the landfill problem through further delays. Despite a court-ordered deadline for promulgation of February 1, 1982, no regulations have appeared. And EPA has not given the Court any indication of when the regulations will be out. In the mean time, landfills continue to receive hazardous waste and to operate without meaningful regulations.

(2) Deferral of Reporting Requirements. On February 23, 1982, EPA announced that it had deferred three important reporting requirements until August, 1982. Among the deferred requirements is the Annual Report, formerly due on March 1, 1982. This report was to have been filed by the owner or operator of both on-site and off-site facilities for the purpose of describing the nature and quantity of waste and method of treatment, storage or disposal. This information is crucial for both EPA and the public since we still do not have any comprehensive information on what kind of waste ends up where. The substitute proposed by EPA for the annual report, a statistical survey of 10% of the industry, will not provide EPA with sufficient information for regulatory purposes. More importantly, since manifests are not public documents, the public is kept totally in the dark about the activities of local facilities. One can't help speculating that EPA prefers it that way.

On the same date, EPA deferred the due date for groundwater assessment outlines until August, 1982. This report was due on November 19, 1981 and required owners and operators to outline groundwater assessment programs capable of determining the nature and extent of groundwater contamination at sites. The purpose of the outline was to insure that if contamination was discovered, an investigation could be immediately undertaken to determine the extent of the problem. EPA states that it intends to eliminate this important requirement.

EPA also deferred submission of quarterly reports on groundwater quality, formerly due on March 6 and June 3, unless groundwater monitoring shows a violation in primary drinking water standards. Since so few chemicals of concern have primary drinking water standards, very little groundwater contamination occuring between now and August will be reported. Notably, this deferral was announced at about the same time EPA released information that 55% of inspected facilities were not in compliance with groundwater monitoring requirements. This, of course, raises the question of what EPA's motives really are in the deferring the reporting requirements.

In what has become a common practice, these deferrals were announced without notice and opportunity to comment.

(3) Regulations Governing Surface Storage Impoundments and Incinerators. Last July, EPA administratively stayed two important sets of regulations governing 850 existing hazardous waste incinerators and 1500 hazardous waste surface storage impoundments. The surface storage impoundment regulations were promulgated on January 12, 1981 and incinerator regulations

were promulgated on January 23, 1981. Both sets of regulations were promulgated pursuant to court order and were to have become effective six months later. However, on June 26, Mrs. Gorsuch sent a letter to OMB Director Stockman stating that she had reviewed the options with regard to these regulations and had decided to move toward suspending them.

Gorsuch concluded in the letter that an automatic suspension of the regulations would probably be illegal. To get around this legal hurdle, EPA in late July announced its intention not to process permits pursuant to the regulations in the interim. This accomplishes the same thing as an outright suspension or administrative stay of the regulations, since they are no longer being applied to any existing incinerators or surface storage impoundments. This stay was put into place without notice and opportunity for comment. Three months later, in late October, EPA proposed to suspend the regulations.

The only requirements that now apply to these facilities are the interim status standards--largely administrative requirements not designed to include technical, design, construction and operation standards necessary to protect human health and the environment._/ In the case of incinerators,

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_/ See Hazardous Waste Facilities with Interim Status May be Endangering Public Health and the Environment, GAO, CED-81-158, September 28, 1981, pp. 18-21. See also 45 Fed. Reg. 33159 (May 19, 1980).

the regulation requires only that the operator of an incinerator must hourly go outside and look at the plume to see what color it is. Not much more is required.

The administrative stay of the regulations was undertaken by EPA based on industry assertions that it would be too costly to comply with the regulations. However, review of documents submitted by industry on the need for regulatory relief reveals that there is little data supporting industry's conclusory statements that existing facilities cannot meet the standards as they were originally promulgated. Although there have been persistent rumors that EPA intends to put the stayed regulations back into effect, nothing has happened. In the mean time, at least nine months unnecessary delay in controlling these facilities has ensued.

(4) Regulation of Boilers.
Even if EPA puts the regulations governing existing incinerators back into effect, major sources burning hazardous waste will be left unregulated. In what has turned out to be a major gap in regulation, EPA, starting with the May 1980 regulations and reiterated in the 1981 incinerator regulations, chose not to regulate the burning of hazardous waste as a fuel for the purpose of recovering usable energy. Thus, two facilities may be burning the same mixture of toxic waste, but

one may be totally unregulated if it is considered to be producing usable energy. This is a significant loophole, since, according to an EPA contractor, about 20 million metric tons of hazardous waste are burned every year in these unregulated facilities. Furthermore, this loophole, along with the high price of fuel, offers an attractive incentive to increase the use of facilities generating energy instead of regulated incinerators. Despite the fact that EPA has acknowledged the authority and need to regulate these sources, no definite proposal on how or when that will happen has been put forward.

(5) Insurance Regulations.

As part of the court-ordered promulgation schedule, EPA promulgated regulations concerning financial responsibility for hazardous waste facilities in January 1981. Part of these regulations required owners/operators of treatment, storage and disposal facilities to purchase and maintain insurance for sudden occurrences (spills, explosions), and owners/operators of surface impoundments, landfills and land treatment facilities to purchase and maintain insurance for non-sudden incidents (groundwater contamination) during the operating life of the facility. Thus, citizens located near a waste management facility would be assured that, at least to some extent, a pool of money is available to compensate them for injury to person or property if a release occurs. The regulations were to be phased in over a three-year period to lessen the burden on the regulated market and to ensure the availability of the necessary policies.

The effective date of the insurance regulations was to have been July 1981. EPA, however, postponed the effective date of those regulations until October, 1981, and again until April 1982, while it reevaluated the requirements with the intent of suspending them entirely. The deferrals were announced without notice and opportunity for comment.

The insurance requirements were supported by a wide range of interests including environmentalists, the National Association of State, County and Municipal Solid Waste Officials, the National Solid Waste Management Association, other industry, and some insurance groups. Apparently because of this broad spectrum of support, EPA has announced that the regulations will go into effect in July and be phased in over the next three years. Unfortunately, a year's time has been lost.

(6) Permit Requirements.

EPA and industry petitioners have signed a consent agreement in litigation concerning the consolidated permit regulations issued in May 1980. On the three most important issues in the RCRA portion of that litigation, EPA reversed its previous positions and for the most part adopted industry's position. The three decisions are the following:

a) Expansions during interim status. Under the EPA-industry proposal, interim status facilities would be allowed to expand their capacity up to 50% without obtaining a permit from EPA. The term "facility" is defined very broadly to include all types of storage and disposal. As a result, if a facility currently has two incinerators, it would be allowed to build and operate a third new incinerator without prior EPA approval. The proposal would also allow landfills to build new units half again the size of the existing landfill without meeting final regulations meant to protect public health and the environment. This is contrary to Congress' intent that EPA establish a permit system as quickly as possible to bring hazardous waste facilities under control.

b) EPA will no longer require preconstruction review for incinerators and surface impoundments. Preconstruction review will only be required for landfills and other land disposal facilities. EPA's justification for suspending preconstruction review for incinerators and surface impoundments is that the location of such facilities is not relevant. Clearly this is not the case, since even under EPA regulation, incinerators are allowed to emit some hazardous pollutants and there will certainly be some violations of the no-discharge rule for impoundments.

c) Lifetime permits. Under the EPA-industry proposal, a hazardous waste facility would receive a permit for the lifetime of that facility. The requirement currently in the regulations is that the permit be issued for a maximum ten-year period only. The current requirement compels EPA periodically to review the terms and requirements of permits as they are renewed. Under the terms of the settlement, EPA's updating of permits will be largely discretionary.

(7) Suspension of the Ban on Liquids in Landfills. The most graphic illustration of the prevailing attitude in EPA in the past year toward regulation of hazardous waste is provided in its abrupt suspension on February 25, 1982 of the ban on placing drums of liquid hazardous waste in landfills. The ban had been promulgated on May 19, 1980 and went into effect on November 19, 1981.

The ban was promulgated by EPA for compelling health and environmental reasons: all landfills leak and placing drums of liquid waste in landfills encourages the leakage. The drums degrade, releasing their contents, and the crushing down of drums creates subsidence and cracks in the covers of landfills. Despite acknowledgement that drummed liquids in landfills present significant problems, EPA suspended the ban without giving notice or allowing the public to comment. At the same time, EPA proposed to allow up to 25 percent of the volume of a landfill to contain drummed liquid hazardous waste.

We are encouraged that EPA has admitted its mistake and reimposed the ban. The public furor unleashed by this incident has apparently convinced EPA, at least for the time being and on this issue, that the public will not tolerate a return to past bad practices.

(8) Lack of Forward Movement.

The May 1980 regulations promulgated by EPA significantly restricted the coverage of RCRA. For example, small generators of hazardous waste (under 1000 kilograms per month) have been exempted from RCRA requirements. EPA stated an intention to initiate a rulemaking to narrow the exemption.

Despite the fact that a petition for rulemaking to do just this was filed a year ago, no action has been taken to address this exemption.

EPA also exempted domestic sewage from RCRA coverage. Given the present cutbacks in the pretreatment program under the Clean Water Act, this is a potentially significant loophole which must be plugged.

The list of hazardous waste promulgated by EPA was very narrow. Incredibly, it does not cover organic chemical wastes which constitute some of our most dangerous wastes. This is a major shortcoming that EPA has failed to address. Instead of moving forward to list a broader range of wastes, EPA has, in fact, delisted several compounds.

(9) Lack of Permitting and Enforcement. RCRA regulations are meaningless unless they are implemented through the permit process. Unless EPA or a state requires a facility to apply for a permit and then issues the permit, facilities only have to comply with the weak interim status requirements. Public health and the environment will not be adequately protected until permits are issued to all major facilities. It is therefore imperative that the issuance of RCRA permits be a high priority for EPA. Permit issuance must be followed by aggressive enforcement to insure compliance.

To date, EPA has issued exactly two RCRA permits. According to budget documents, EPA plans to issue 100 permits in 1982. Given EPA's current pace, we doubt that even this unambitious goal can be met. Even if it could, this is an inexcusably slow pace. Undoubtedly some of the delay is attributable to the fact that EPA has chosen to re-evaluate regulations that had been promulgated and that the landfill regulations have still not been published. This underscores the urgent need for EPA to put all RCRA regulations into effect as quickly as possible.

Some of the delay is also attributable to budget cuts. Funding for abatement and control of hazardous waste will drop from $86.2 million in 1981 to a proposed $62.5 million in 1983 if EPA's proposal is adopted -- in all a 34% decrease from 1981. Much of the proposed decrease in funding from FY82 to FY83 will be in the funding for EPA regional offices, precisely at the time when permitting responsibilities and costs for those offices are increasing. Likewise, EPA proposes a 16% cut in FY83 in grants to states (from $41.7 millions to $35.1 million) when their permitting activities are also increasing. These budget cuts are inconsistent with an intention expeditiously to bring dangerous facilities under control through the permit process.

EPA's lack of commitment to meaningful control of hazardous waste is also evident in its failed enforcement program. There is no valid excuse for the fact that no hazardous waste enforcement cases have been filed since June 1981. While there are other methods of enforcements besides litigation, the number of cases filed provides a fair barometer of enforcement efforts generally. Without the very visible signal that litigation represents, industries can and do feel they can violate the law with impunity. EPA must find the necessary willpower and seek the necessary funding to return credibility to its enforcement program.

WHERE DO WE GO FROM HERE?

Almost two years ago, EPA made the following statement in the preamble to the May 1980 RCRA regulations:

> Congress was aware that the hazardous waste regulation would impose substantial costs on the regulated community. See, e.g., H.R. Rep. at 4, S. Rep. at 4. Despite this recognition, Congress deliberately rejected provisions that would require consideration of cost burden on industry or to moderate the Act's environmental objectives. For these reasons, the Agency concludes that the Act prohibits it from considering such costs in the development of Subtitle C regulations as a basis for lessening the standards it considers necessary to ensure protection of human health or the environment.
>
> 45 Fed. Reg. 33089 (May 19, 1980)

What we have witnessed this year is an 180 degree reversal in attitude. No longer was protection of human health and the environment the guiding principle in regulating hazardous wastes. Under their perceived mandate to relieve the burden of regulation on industry, the leaders of EPA were guided more by considerations of cost and the ideology of new federalism than by the mandate of Congress as expressed in RCRA. Furthermore, most of EPA's deregulatory action was taken without observing the legal nicety of notice and opportunity for comment. EPA was apparently under the delusion that only the opinion of regulated industry counted. This is arrogant in the extreme and intolerable from an agency whose basic mandate is to protect the public.

We are encouraged by EPA's recent indication that they have changed their mind, albeit begrudgingly, on a few deregulatory actions taken this past year. Reimposing the ban on liquids in landfills and allowing the liability insurance regulations to go into effect are steps in the right direction. EPA should also re-examine deregulation initiatives still in process, such as its proposals to loosen reporting requirements, to weaken permitting procedures, and to suspend regulations governing existing incinerators and surface storage impoundments.

EPA must move ahead quickly on regulating landfills. The long overdue permitting regulations must be promulgated immediately and must be strong enough to ensure protection of public health and the environment from these dangerous facilities. In particular, EPA must include, among other things, location standards based on hydrogeological conditions and a comprehensive groundwater monitoring program to insure that migration of chemicals is detected early enough to avoid damage.

Moreover, EPA should closely examine the overall desirability of continuing to use landfills for hazardous waste. All landfills leak. Man is unable to design or construct a landfill that does not leak. Attached to this testimony is a short summary of the current scientific understanding of landfills and their serious problems. The summary supports the proposition that we as a society should be moving away from using landfills. Except for the current ban on placing drummed liquids in landfills, nothing in EPA's current policy provides incentives to move us away from landfills. We urge EPA to examine the initiatives in California and New York to limit the use of landfills and to adopt a similar approach on the federal level.

EPA should, furthermore, undertake an aggressive program aimed at discovering, publicizing and encouraging the development and use of strategies which destroy, detoxify, or reduce hazardous waste. Among these strategies are incineration, recycling and reuse, and use of chemical or biological agents to neutralize toxic waste. All of these processes, of course, in themselves, have the potential for causing harm, and must be closely controlled and regulated. EPA should also examine ways in which the actual production of hazardous waste can be minimized.

In addition, EPA should firmly commit itself to an expeditious permitting program. EPA should put itself and the states on a schedule under which all permits would be issued by December 31, 1986 and should ask for sufficient resources to insure that the schedule is met. If EPA i[illegible] unable to commit itself, Congress should impose that deadline by statute. To continue the open-ended approach we now have is to continue to jeopardize human health and the environment for the foreseeable future.

Lastly, we hope we have seen the last of EPA's rash of rulemakings without notice and comment. EPA cannot meet its mandate under RCRA by continuing its practice of decision-making in a vacuum. The regulations that have been promulgated were based on a very lengthy, public rulemaking. Before those regulations are significantly changed, the proposed changes must be subject to public scrutiny. The law and sound public policy of our democracy demands no less.

At present, EPA's hazardous waste program is philosophically bankrupt. Decisions are made as a result of political pressure and tight budgets rather than consistent with a policy to protect public health and the environment. It is extremely short-sighted not to spend money today to avoid what we know will be tomorrow's problems. With the production of hazardous waste rising, the price of cleaning up our mistakes tomorrow will be greater than avoiding them today. EPA needs desperately to develop a policy aimed at minimizing exposure of people and the environment to hazardous waste and at encouraging the development of safer alternative technologies to treat and reduce hazardous waste. Until that happens, the mandate of RCRA will remain unfulfilled.

Thank you for the opportunity to testify. I will be happy to answer any questions.

-APPENDIX-

Land disposal practices have caused considerable contamination of our groundwater and surface water resources.[1,2,3,4] This contamination has resulted in the displacement of communitites, closure of hundreds of drinking water wells, major fish kills, loss of agricultural lands, and numerous adverse human health effects. Past failures to manage hazardous waste properly have been of sufficient magnitude to draw nationwide attention to the problem, resulting in the passage of major federal legislation. They have also created widespread public anxiety about hazardous waste facilities, causing strenous opposition to the siting of new "secure" landfills.

The major problems with hazardous waste landfills have resulted from our inability either to site or to design a landfill properly to contain the wastes over the period of time during which the toxicity of the chemicals persists. At this point, we do not have sufficient analytical tools and models accurately to assess the suitability of sites. The many variables which can affect the success of landfill (e.g., permeability of the soil, depth to groundwater, integrity of the impermeable layer, etc.) are difficult in themselves to evaluate; the interaction of the variables is thus nearly impossible to predict.[5]

A prominent example of this inability accurately to assess the performance of hazardous waste landfills is the landfill in Wilsonville, Illinois operated by SCA Services. This facility employed the best available technology to contain wastes and was endorsed by the Illinois and U.S. EPA as a model facility, but nevertheless has recently been found to be leaking.[6] The Illinois Supreme Court has ordered the landfill permanently closed as a public nuisance and all of the wastes removed.[7]

We do not possess the technical and institutional ability to contain hazardous wastes in a landfill perpetually. The U.S. EPA has stated that, even when a site is properly located and best available containment strategies are employed, wastes will eventually migrate from the site.[8] The following specific technical problems with landfills have been documented:

1. Hazardous constituents disposed in landfills will often remain hazardous for periods of time which exceed the performance life of a "secure" landfill. For example, heavy metals such as lead and mercury remain hazardous forever, while the performance life of a "secure" landfill, even under the best conditions, is estimated at a maximum of 50-100 years.[9]

2. The biodegradation of toxic organic hazardous waste is very slow, and little is known about the toxicity of the

by-products of degradation. In some instances chemical processes may actually increase toxicity.[10] Microbial methylation of mercury, for example, produces a more hazardous compound than the inorganic metal.

3. The ability to build and maintain an effective containment strategy for landfills is questionable.

a. Clay, thought to be ideal for containing hazardous waste, is not 100% impermeable. Even with permeability of 1 x 10^{-8} cm/sec, wastes will eventually migrate into groundwater.[11]

Clay is subject to cracking and erosion. For example, a clay cap built to cover asbestos tailings in Globe, Arizona has already cracked, and asbestos dust is again blowing through streets and homes.

The permeability of clay can be enhanced after exposure to certain chemicals like alcohols and acids.[12]

Recent research conducted at Texas A&M demonstrates that clay liners break down from contact with organics and crack, thereby forming conduits for wastes to travel offsite.[13] Moreover, the thickness of in-situ clay often varies from place to place throughout the site, and there may be thin spots through which wastes can easily permeate.

b. Man-made synthetic liners are likewise not 100% impermeable. The major problems with liners include rupture during placement and operation of the landfill,[14] rupture due to incompatibility with chemical wastes[15] or to subsidence and settling of the landfill after closure, inability to fix leaking liners, and eventual deterioration of liners over time.

c. A study was conducted recently on four of the five modern, onsite landfills in New Jersey. All were double-lined with clay or polyvinyl chloride; all met regulatory standards; and all were discovered to be leaking.[16]

4. Leachate collection systems are not 100% efficient.[17] There is no better testament to the problems of leachate collection systems than that contained in the preamble to the February 25 proposal. 47 Fed. Reg. 8310-11.

5. Monitoring wells are not able to detect migrating pollutants in most cases.[18] Because leachate travels in narrow bands vertically through soil cracks and along clay seams, the chances are slight of detecting all migrating pollutants, even with the best and most extensive monitoring equipment.

The institutional problems associated with landfills center around the lack of arrangements for perpetual maintenance. Perpetual maintenance is critically important to ensure continued protection of public health for future decades. No public body has been identified to assume adequately the costs and responsibilities for the continual upkeep of a site after the 30 year post-closure date set by RCRA. The costs for such upkeep can be exorbitant, as shown in the attached Georgia Institute of Technology Chemical Waste Disposal Facility Study, and have not been acknowledged or budgeted. Without such arrangements, management plans which include landfilling as an option are irresponsible.

REFERENCES

1. Office of Water Supply and Office of Solid Waste Management Programs, EPA, *Waste Disposal and their Effects on Groundwater, the Report to Congress* (1977).

2. Congressional Research Service, *Resource Losses from Surface Water, Groundwater and Atmospheric Contamination: A Catalogue*, prepared for the Senate Comm. for Government and Public Works, 96th Cong., 2d Sess. at 79-220 (Serial No. 96-9, 1980).

3. Subcommittee on Oversight and Investigation, House Committee on Interstate and Foreign Commerce, 96th Cong. 1st Sess., *Hazardous Waste Disposal*, p. 1 (Committee Print 1979).

4. Office of Solid Waste Management Programs, EPA, *Report to Congress: Disposal of Hazardous Waste* (1974).

5. Skinner, Peter N. "Performance Difficulties of 'Secure' Landfills for Chemical Waste and Available Mitigation Measures," in *The Hazardous Waste Dilemma: Issues and Solutions* 32. American Society of Civil Engineers (1980).

6. Hazardous Materials Intelligence Reporter 3 (Jan. 29, 1982).

7. See *Village of Wilsonville v. SCA Services, Inc.*, 16 ERC 1105 (Ill. S.Ct. 1981). U.S. EPA's position is reported in 2 Chemical and Radiation Waste Litigation Reporter 268 (1981).

8. 46 Federal Register 11128 (February 5, 1981).

9. *Ibid*.

10. Environmental Studies Board, Committee to Review Methods for Ecotoxicology, *Testing for Effects of Chemicals on Ecosystems* at 21 (1981)

11. 46 Federal Register 11128 (February 5, 1981).

12. JRB Associates, Inc., *Draft Manual for Remedial Actions at Waste Disposal Sites*, EPA Contract No. 68-01-4839 (June 20, 1980).

13. Anderson, D.C., Brown, K. and Green, J., "Organic Leachate Effects on the Permeability of Clay Liner," presented to the National Conference on Management of Uncontrolled Hazardous Waste Sites (Oct. 28, 1981).

14. Gunkel, Robert C., U.S. Army Engineers Waterways Expt. Station, *Membrane Liner System for Hazardous Waste Landfills.*

15. Haxo, H.E., *Durability of Liner Materials for Hazardous Waste Disposal Facilities* Matrecom, Inc., Oakland, CA.

16. Montague, Peter, *Four Secure Landfills in New Jersey--A Study of the State of the Art in Shallow Burial Waste Disposal Technology* (DRAFT), Princeton University (February 1, 1981).

17. 46 Federal Register 11198 (February 5, 1981).

18. Slimak, Karen M., "Landfill Disposal Systems, 27 *Environmental Health Perspectives* 315 (1978).

Summary of Findings and Recommendations
of
The Center for Environmental Safety
Georgia Institute of Technology
Chemical Waste Disposal Facility Study

On September 3, 1980 the Center for Environmental Safety at Georgia Tech was asked by the Heard County Commissioner to undertake a study of the proposed hazardous chemical waste landfill facility proposed by Earth Management, Inc. (EM). The Center agreed to examine the proposal strictly on its merits, noting the overriding concern of everyone involved that "if facilities threatening the public health and the environment are licensed, the already substantial public opposition will grow to such proportions as to prevent the siting of sound hazardous waste management facilities anywhere."

Noting that the proposed facility is not a disposal facility, but a "perpetual storage", the Center identifies common problems of landfill operations which cause:

(1) Surface and ground water contamination; and

(2) Uncontrolled chemical reactions between incompatible wastes.

A summary of findings regarding the seven aspects investigated is presented below.

1. Disposal Methods to be Employed.

In the most optimistic case, careful maintenance and cap replacement on a regular basis is needed. Since a landfill site would need maintenance for an unknown period of time, a very low estimate of cost can be obtained based on two hundred years. Figures are based on a Research Triangle Institute study which ignores concurrent pumping and treatment costs.

Inflation Rate	Post Closure Costs (million dollars) First Thirty Years	Post Closure Costs (million dollars) Total 200 Years
0%	2.43	16.2
3%	3.85	995.0
5%	5.38	28,000.0
10%	13.20	154,000,000.0

Who pays for Post-Closure and Maintenance (PC&M) Costs? EPA and EPD currently require that the company provide PC&M for a period of thirty years.

Inflation Rate	Percentage of PC&M Costs Paid During 1st 30 Years	Percentage Public Pays
0%	15.0%	85.0%
3%	.4%	99.6%
5%	.02%	99.98%
10%	0.0%	100.0%

Conclusions

(1) No cell for the perpetual storage of hazardous waste has been demonstrated to prevent completely the infiltration of water for even a single decade.

(2) Perpetual care and maintenance are required to prevent major releases to the environment necessitating financial planning before opening a hazardous waste storage facility.

2. Materials to be Treated or Disposed of.

(1) Many chemicals now listed as acceptable by EPD and EM should be excluded due to the dangers posed.

(2) Wastes should be treated (detoxified or transformed into less hazardous materials) before burial to minimize risk.

(3) A laboratory more complete than that proposed by EM is necessary for analysis. The cost of necessary additional instrumentation could easily exceed one million dollars.

3. Site Restrictions and Bonding Requirements.

(1) EPA Phase II regulations, not yet released, must be met.

(2) Financial requirements of the Georgia Hazardous Waste Management Act do not address the issue of perpetual care and maintenance.

4. Provisions for Citizen Oversight.

(1) No provision for citizen oversight or input is made.

(2) RCRA (section 7002) provides for "citizen suits" when the public feels that regulations are not adequately enforced by the State or EPA.

5. Results of or Plans for Environmental Impact Statements and for Continued Monitoring.

(1) No formal environmental impact statements have been required and none are planned.

(2) Additional monitoring is necessary.

6. Level of Activity at the Proposed Earth Management Facility.

(1) EM does not justify their low anticipated market share of 1-3%. Level of activity affects:

(a) Density of truck traffic and the likelihood of accidents;

(b) Personnel needed, especially for chemical testing and careful recordkeeping; and

(c) Rate of filling, which affects the value of the facility as a source of tax revenue and an attraction for other industry.

Market Share	Cells Filled Per Year	Active Life of Facility (Years)
1-3%	1-2	20-40
3-9%	3-6	7-14

7. Leachate Treatment System.

There is a question as to whether the EM treatment system may be:

(1) Of insufficient capacity to handle an extremely intense storm or a protracted rainy period.

(2) Incapable of handling elements from even common industrial sludges.

(3) Lacking in laboratory facilities to allow a complete and timely analysis of waste water to be sprayed over acreage.

(4) Unable to function throughout the perpetual care period.

RECOMMENDATIONS

(1) Since the conflict which has developed around the proposed EM facility is symptomatic of a national problem, citizens and government should work through the problems in a manner which will make a positive contribution.

(2) When EPA Phase II regulations are published, a comprehensive comparison is needed.

(3) A citizens or governmental group might be formed to work with companies in arriving at a plan for a hazardous waste operation which provides an attractive balance between risks and benefits. The Center for Environmental Safety at Georgia Tech is prepared to assist.

(3) If the current EM proposal is pursued for licensing, a number of questions need detailed consideration before approval.

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TESTIMONY OF JANE BLOOM

NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

HEARING ON

REAUTHORIZATION OF THE
RESOURCE CONSERVATION AND RECOVERY ACT

WASHINGTON, D.C.

April 26, 1982

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INTRODUCTION

The Natural Resources Defense Council (NRDC) is a national non-profit environmental organization supported by 40,000 members who are dedicated to the wise use of the nation's land and water resources, and to the protection of human health and the environment. Since NRDC's inception in 1970, the organization's staff attorneys and scientists have actively participated in administrative, legal and legislative efforts to control involuntary exposures to toxic substances in the environment. As an important part of our program to ensure protection of surface and underground sources of drinking water from contamination by toxic chemicals, NRDC has monitored EPA's implementation of two key statutes which provide overlapping authority for EPA to regulate the impacts of hazardous waste on drinking water supplies: the Resource Conservation and Recovery Act (RCRA), enacted in 1976, and the Safe Drinking Water Act (SDWA), passed by Congress in 1974. We welcome this opportunity to present our views on EPA's recent actions implementing these two statutes, particularly with regard to the protection of groundwater.

RCRA was passed in response to intense public concern about the serious health, environmental and economic harm which has resulted from the improper disposal, storage and treatment of hazardous waste. Tragic incidents such as Love Canal and the Valley of the Drums graphically demonstrate the potentially severe consequences of these practices. By mandating the development and implementation of a comprehensive, "cradle-to-grave" national program to ensure proper management of hazardous waste, RCRA provides EPA with the legal authority to prevent the creation of these poisonous legacies.

One of the best-documented, major public health problems created by improper hazardous waste disposal practices has been the contamination of groundwater, which supplies 50% of the nation's drinking water. To address this concern, Section 1006 of RCRA requires EPA to integrate its implementation of provisions of RCRA with the appropriate provisions of the Safe Drinking Water Act, which is designed to ensure the protection of drinking water supplies. One key threat to drinking water addressed by the SDWA is the practice of disposing of hazardous and other liquid wastes by injecting them into wells -- and sometimes directly into aquifers. The SDWA's Underground Injection Control (UIC) provisions require EPA to prohibit these practices, which are widespread in certain states, if they endanger current or potential underground sources of drinking water.

Subsequent to the enactment of RCRA, the closing of numerous public and private wells alerted Congress and the public to the threats posed by hazardous waste to drinking water supplies. Concern has increased as new and more comprehensive monitoring data indicate that the contamination of groundwater sources is a more serious and widespread problem than was originally thought. In a recent Federal Register Notice, EPA announced that organic chemicals, many of which are believed to cause cancer and other life-threatening diseases in humans, have been detected in 45% of the public water systems that draw on groundwater and serve over 10,000 people.* The presence of these chemicals in underground sources of drinking water is generally believed to be the result of improper disposal of hazardous waste. The EPA data also indicate that these chemicals have been detected in extraordinarily high concentrations, which exceed by several orders of magnitude those found in surface drinking water sources.

As EPA acknowledges, groundwater is often prohibitively expensive or technologically impossible to clean up. Thus, this new evidence of extensive infiltration of drinking water by hazardous substances indicates the desperate need for even more stringent controls on hazardous waste practices that endanger drinking water than are currently in place. Yet EPA has implemented these statutes, which were designed in part to protect underground sources of drinking water, expressly to authorize certain practices which are known to result in groundwater contamination.

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* 47 Fed. Reg. 9351 (March 4, 1982). This figure may not be representative of the magnitude of the problem, because water utilities do not routinely monitor for the presence of organics. Indeed, a recent GAO report indicates that regular sampling and monitoring by water suppliers to detect violations of the few contaminants included in the Interim Primary Drinking Water Standards under the SDWA is the exception rather than the rule in most states. Consequently, the extent of contamination may be considerably greater than indicated by EPA's figures. "States' Compliance Lacking in Meeting Safe Drinking Water Regulations," Report by the General Accounting Office to the Administrator of EPA, at 6 (1982).

In particular, EPA

(1) presently sanctions injection of hazardous waste directly into, as well as above, current or potential groundwater sources of drinking water under regulations implementing the UIC provisions of the SDWA;

(2) is currently considering relaxing the ban on landfilling liquid hazardous wastes in drums, now imposed under its RCRA regulations to ensure protection of groundwater and the environment from contaminants migrating from landfills;

(3) has reduced, proposed to eliminate, or failed to impose groundwater monitoring requirements necessary to detect leakage of hazardous substances from hazardous waste facilities into groundwater.

As explained in detail below, It is NRDC's belief, therefore,

- that RCRA now provides EPA with adequate authority to protect the public health and environment from much of the harm caused by hazardous waste;
- that the problems experienced thus far are due to inadequate EPA implementation; and

- that RCRA should be reauthorized with adequate funds for implementation; in particular, a sizeable authorization should be provided to assist the states that will bear primary responsibility for implementing the RCRA program.

1. EPA Has Failed To Take Required Action To Prevent Endangerment Of Groundwater Sources Of Drinking Water From Disposal Of Hazardous Waste By Underground Injection Under RCRA And The SDWA.

Underground injection is a relatively inexpensive and potentially widespread disposal practice that can pose serious threats to groundwater sources of drinking water. Under the Underground Injection Control Program (UIC) of the SDWA, which requires EPA to prohibit any underground injection that endangers drinking water, EPA classified wells injecting hazardous waste into two categories, termed Class I and Class IV. Class IV wells pose the most serious threat to groundwater because they either involve direct injection of hazardous waste into a drinking water aquifer or injection into shallow wells above such aquifers.* Although the exact number of existing Class IV hazardous waste injection wells is not known, EPA made a preliminary estimate in

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* Class I wells are those injecting hazardous wastes below aquifers containing underground sources of drinking water.

June of 1980 that between 5,000 and 10,000 such wells may be in existence nationwide.*

Because of the dangers inherent in this method of disposing of hazardous waste, both RCRA and the SDWA require EPA to regulate underground injection of hazardous waste. Rather than effectively using the complementary provisions of each statute to create a comprehensive regulatory scheme for protecting drinking water from contamination by the injection of hazardous wastes, however, EPA has used this statutory overlap as an excuse to avoid effective regulation under both statutes.**

The cumulative effect of EPA's action under both RCRA and the SDWA has been to actively promote hazardous waste practices which endanger drinking water. Although EPA originally proposed to ban certain hazardous waste injection wells entirely in its final UIC regulations of June 1980, EPA abandoned its earlier position due to industry pressure.* Moreover, settlement negotiations arising from a lawsuit brought by affected industry to challenge these regulations caused EPA recently to make further weakening amendments to its final regulations concerning hazardous waste injection wells.**

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* 45 Fed. Reg. 42497 (June 24, 1980).

** Because RCRA and the SDWA overlap, EPA purportedly coordinates its implementation of the two statutes by regulating aboveground ancillary facilities and activities associated with injection of hazardous waste under RCRA, and injection wells under the SDWA. EPA does not require those facilties permitted under the UIC program to obtain a RCRA permit. Removing RCRA protection from underground injection activities leaves a gap, however, because permitting under the SDWA does not begin until EPA has authorized states to issue UIC permits. To fill the gap, EPA has made certain of the interim status requirements of the RCRA program applicable to Class IV and Class I hazardous waste injection wells until state programs are authorized.

EPA claims that this program provides stringent protection for drinking water. A charitable assessment of this purportedly coordinated regulatory program is that is has resulted in little, if any, protection of drinking water, primarily because the interim status regulations are administrative and do not provide environmental protection. See "Hazardous Waste Facilities With Interim Status May Be Endangering Public Health And The Environment," Report to Congress by the General Accounting Office (1981).

The current UIC regulations expressly authorize injection of hazardous waste directly into underground sources of drinking water. This practice is allowed to continue until such time as state UIC programs are approved by EPA, a process that is only now getting underway. In addition, injection into existing shallow wells above drinking water aquifers, a practice EPA deemed "inherently dangerous," is authorized until such time as EPA promulgates permitting requirements for Class IV hazardous waste injection wells. Promulgation of Class IV permitting requirements has been "reserved" since 1980, however, and no date has been set for their issuance. EPA's explanation for this delay is that these requirements must be "coordinated" with the final landfill permitting regulations now long overdue under RCRA. By reserving indefinitely the requirements for Class IV hazardous waste injection wells under the SDWA, and delaying issuance of final landfill permitting requirements under RCRA, EPA has created a "Catch-22" situation, in which there are presently no substantive requirements applicable to underground injection of hazardous wastes that endangers drinking water.

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* 45 Fed. Reg. 42472 *et seq.* (June 24, 1980).

** 47 Fed. Reg. 4992 *et seq.* (February 3, 1982); 46 Fed. Reg. 48243 *et seq.* (October 1, 1981).

As noted previously, the only controls imposed by EPA on underground injection of hazardous waste into Class IV wells at the present time are the grossly inadequate interim status standards for hazardous waste facilities.* As the GAO recently reported to Congress, these standards are largely administrative and provide no significant protection against the serious dangers posed by hazardous waste.** To make matters worse, EPA has made the groundwater monitoring requirements imposed under interim status inapplicable to UIC facilities.*** Consequently, because monitoring is not presently required for Class IV hazardous waste injection wells under the UIC program, EPA has no way of knowing whether contamination is already occurring, or is likely to occur, as a result of underground injection of hazardous waste.

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* Once state UIC programs have been approved, RCRA permitting requirements will not apply to underground hazardous waste facilities. Permitting standards under the UIC program, which have yet to emerge, will provide the only protection against contamination of groundwater by Class IV hazardous waste injection wells.

** "Hazardous Waste Facilities With Interim Status May Be Endangering Public Health and the Environment, Report to Congress by the General Accounting Office, at 18-21 (1981).

*** 45 Fed. Reg. 33219 (May 19, 1980).

The net result of EPA's approach is that not even minimally adequate protection of groundwater is now being provided under either RCRA or the SDWA. While EPA plays this deadly "shell game" with the UIC Program, the burden has shifted to the public to bear the risk of potential contamination of its drinking water.

2. Groundwater Is Not Adequately Protected By EPA's Interim Status Regulations Governing Landfills, And Would Be Seriously Threatened If EPA's Current Proposal To Partially Lift Its Ban On Landfilling Of Containerized Liquid Hazardous Wastes Were Implemented.

Improper disposal of hazardous wastes in landfills is generally believed to be responsible for much if not most of the contamination of groundwater by volatile organic chemicals documented to date.* Landfilling of many specific hazardous chemicals, whether solid or liquid, threatens drinking water and, in our view, should be prohibited. However, as EPA has repeatedly acknowledged, landfilling of *liquid* containerized hazardous wastes poses especially great risks because over time drums of liquid wastes decay, releasing their contents. The hazardous contents inevitably migrate out of the landfill into the environment, and eventually reach groundwater. In addition, subsidence, resulting from the collapsing of drums, can cause potentially irreparable damage to the landfill cover and consequent migration of contaminants from the landfill.

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* See ANPR, National Revised Primary Drinking Water Regulations, Volatile Synthetic Organic Chemicals In Drinking Water, 47 Fed. Reg. 9352 (March 4, 1982); "Hazardous Waste Disposal," Report by the Subcommittee on Oversight and Investigations of the House Committee on Interstate and Foreign Commerce, 96th Cong., 1st Sess., at 13 (1979).

Recognizing the severe dangers to groundwater associated with landfilling of drummed liquid wastes, EPA promulgated a ban on landfilling such liquids as part of its interim status regulations.* However, the affected industry voiced its displeasure with the ban during settlement negotiations in litigation,** in which industry challenged various of EPA's regulations under RCRA. Consequently, on February 25, 1982, EPA simultaneously lifted the ban and proposed amendments urged by the industry litigants. If promulgated, the proposed amendments would authorize 25% of the volume of a landfill to be filled with liquid wastes. EPA took these actions while acknowledging repeatedly in its Federal Register Notice the severity of the problems it had documented in promulgating the ban. Considerable public opposition and alarm attended EPA's action. Following a public hearing hastily called after the fact, EPA apparently rethought its decision and reinstated the ban, at least pending the outcome of rulemaking. EPA is still seriously considering the 25% proposal, however, and has extended the public comment period for an additional 90 days.

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* 45 Fed. Reg. 33214-33215 (May 19, 1980).

** Shell Oil v. EPA; See 46 Fed. Reg. 8308-8309 (February 25, 1982).

In light of the overwhelming evidence amassed by EPA, demonstrating that contaminants readily migrate from landfills containing drums of liquid wastes and may enter groundwater, EPA's decision even to propose to authorize this practice seriously undercuts the credibility of EPA's commitment to prevent groundwater contamination by hazardous wastes. This is especially true when safer, and in the long run, more economical alternatives to land disposal currently exist.* NRDC believes that the statutory requirements of RCRA are clear and unambiguously require EPA to maintain a ban on practices found by EPA to inflict such harm to human health and the environment. EPA's implementation, and not defects in RCRA, will be to blame if EPA decides to allow this dangerous disposal practice to continue.

Of equal concern with respect to EPA's commitment to prevent contamination of drinking water by landfills, are the regulations EPA has already promulgated under the interim status provisions of RCRA. Many if not most existing landfills are unlined and do not employ leachate collection and removal systems or other measures necessary to prevent migration of contaminants into groundwater. Yet EPA's interim status program does not require that these protections be provided. This situation is likely to persist for at least the next decade, the time EPA estimates it will take to complete final permitting of hazardous waste facilities. Although groundwater monitoring requirements are in effect for landfills during interim status, the GAO has reported that non-compliance with interim status regulations is rife and EPA enforcement actions are practically non-existent,* thus creating further doubt as to EPA's commitment to protect groundwater under RCRA in the foreseeable future.

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* As EPA acknowledges, these alternatives -- which, according to EPA, include incineration, reprocessing and recovery, and treatment by dewatering or chemical/absorbent processes -- are presently available and feasible. Rather than actively promoting a method of disposing of hazardous liquids which has potentially disasterous environmental consequences, EPA should be focusing its attention and resources on providing incentives and encouragement for the utilization, development and expansion of these alternatives to land disposal of hazardous liquids. EPA's suspension of the ban on landfilling these liquids, and its proposal to partially suspend the ban, however, will senselessly undercut the viability of environmentally preferable alternatives.

3. EPA's Recent Weakening Of Its Groundwater And Other Monitoring And Reporting Requirements Under RCRA Hinders Preventive Action And Enforcement.

Regular groundwater monitoring is essential to early detection of groundwater contamination. It is also the key to determining what background levels of contaminants are, so that leaks from hazardous waste facilities can be discovered before groundwater contamination occurs. Such monitoring is a prerequisite to effective mitigation and enforcement action; however, it is a meaningless enterprise unless the results are expeditiously reported to EPA. These facts formed the basis of EPA's requirement that groundwater near hazardous waste facilities be monitored quarterly for a variety of parameters (i.e., characteristics or constituents of groundwater that can be used to detect leaks and contamination). The results were to be reported to EPA during interim status.* These requirements were to have gone into effect in November 1981, and the first reports were to be submitted to EPA in March and June 1982.

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* "Hazardous Waste Facilities With Interim Status May Be Endangering Public Health And The Environment," Report to Congress by the General Accounting Office, at 9-17, 22-28 (1981).

Recently, however, EPA decided to delay until August 1982 the reporting requirements applicable to these monitoring data, except where monitoring data obtained for drinking water parameters indicates a violation of the Interim Primary Drinking Water Standards promulgated under the SDWA.** EPA's explanation for this suspension is its intention to require reporting on an exception basis only, i.e., only the violations must be reported. It should be emphasized that Interim Primary Standards have been promulgated for only a handful of chemicals, and there are no such standards in effect for volatile organics, which are the constituents of hazardous waste that most typically show up in drinking water.

Little if any reporting can be expected during the suspension period. Thus, the result of the suspension is that at present, EPA is not being apprised of key data which would indicate either that a facility is leaking or that there is the potential for groundwater contamination. Furthermore, lacking monitoring data for the other parameters, the agency will be unable to determine whether the facility is leaking prior to actual contamination of drinking water. Consequently, it will not be possible to detect, much less to prevent, potential contamination of groundwater during the suspension period. The agency's intention to require exception reporting for all parameters could pose many of the same problems in the future.

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* 45 Fed. Reg. 33154 *et seq.* (May 19, 1980).

** 47 Fed. Reg. 7841 *et seq.* (February 23, 1980).

Lack of reporting also makes effective enforcement action practically impossible. EPA's suspension therefore would appear to confirm other indications of EPA's current propensity to leave "enforcement" up to the regulated community.

CONCLUSION

NRDC believes that RCRA provides adequate authority for EPA to do the job Congress intended: to protect public health and the environment from the dangers posed by hazardous waste. Yet, six years after passage of the Act, EPA's record of implementation to achieve this overriding statutory goal is a poor one indeed, especially with regard to protection of groundwater. Promulgation of inadequately protective regulations, weakening of existing protections, and in the case of hazardous waste injection wells, failure to promulgate key regulations -- have characterized EPA's activities under RCRA concerning groundwater over the past year. Reauthorization of RCRA is essential to ensure that the protection mandated by Congress and demanded by the public is provided expeditiously.

Furthermore, appropriation of adequate funds is essential to ensure proper implementation of the Act. This point is especially crucial in light of the increased tasks which are devolving upon the states, who will have primary responsibility for implementation. Most states have extremely limited state funds with which to carry out the many programs authorized under RCRA. Money should be specially authorized to assist the states in carrying out this task, after which Congress should make a sizeable appropriation to enable both EPA and the states to properly implement the Act.

Statement by Donald D. Carruth
President

The American Eagle Foundation
to the members of

the Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
April 26, 1982

HEARING TO REVIEW AND REAUTHORIZE THE RESOURCE CONSERVATION AND RECOVERY ACT of 1976

The Honorable John H. Chafee, Chairman:

It is a privilege for the American Eagle Foundation, a national environmental organization, to present our comments in support of the Resource Conservation and Recovery Act, as amended, which, on its own merits, provides an adequate base for the issuance of valid and workable regulatory requirements by the U.S. Environmental Protection Agency (EPA).

We see no real need at this time for major changes to be made in the Act itself.

On August 1, 1979, I enquired of the Chairman, Ways and Means Committee, U.S. House of Representatives, as to whether that committee supports the statutory meaning which the courts have accorded "common sense" understanding. The August 27, 1979, letter response from Mr. John M. Martin, Jr., Chief Counsel of the committee included, among other things, the following:

> "The definition in Black's Law Dictionary for 'common sense' is as follows:
>
>> Sound practical judgment; that degree of intelligence and reason, as exercised upon the relations of persons and things and the ordinary affairs of life, which is possessed by the generality of mankind, and which would suffice to direct the conduct and action of the individual in a manner to agree with the behavior of ordinary persons."

Mr. Martin closed his letter with:

> "Assuredly, we should all strive to utilize as much of this much admired and sought after quality and attribute as we possibly can in our daily responsibilities, activities and business. I think all branches of the government, legislative, judicial or executive, should strive for this objective."

An example of the use of common sense in supporting a major program for destroying hazard and toxic chemical wastes is set forth in the attached letter to the American Eagle Foundation from Mr. Drew Lewis, Secretary of Transportation (letter dated January 18, 1982). (Exhibit-A). A copy of our letter of October 5, 1981, and attachments to Mr. Lewis are also included regarding at sea incineration of chemical wastes aboard sophisticated incinerator tankships while far at sea and away from masses of people.

Exhibit-B notes the U.S. Maritime Administration's conditional approval of an application for a Federal guarantee of a loan to finance the construction of two United States - flag ships designed to incinerate hazardous chemical wastes at sea. It is our understanding this application has now been approved.

Exhibit-C is an interesting article on chemical incineration at sea.

Exhibit-D includes a few references to the work of this Foundation.

Responses to the Interagency Review Board have shown an outstanding interest by industry and environmentalists in the program. The program holds great promise for improvement in the general economy, environment, workforce, transportation and health benefits to the American people.

It should be noted, however, that a lack of good supportive rules and regulations in EPA has made it very difficult for the incineration at sea program to function, regarding the requirements of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, and the Resource Conservation and Recovery Act of 1976, as amended. Also, there is a very great need to improve and thoroughly revise EPA's permit program into a practical and effective support mechanism.

The currency of the United States includes the reference: "In God We Trust." Bearing in mind the U.S. Government recognizes this fact, and that most people in the United States would concur, a sound basis exists for government at all levels to be responsive to the needs of the governed.

Exhibit - A

The Secretary of Transportation

Washington, D.C. 20590

JAN 18 1982

Mr. Donald D. Carruth
President
The American Eagle Foundation
3306 Winnett Road
Chevy Chase, MD 20815

Dear Mr. Carruth:

Thank you for your expression of support for the Interagency Chemical Waste Incinerator Ship Program. I agree with you that the establishment of a privately owned and operated incinerator ship capability in the United States can greatly assist in solving our nation's serious hazardous waste disposal problem. Incineration at sea aboard specially designed and operated ships has been determined to be a cost-effective, technically efficient, and environmentally acceptable technology for the destruction of many types of combustible hazardous waste.

The Maritime Administration and the Coast Guard, both of the Department of Transportation, are working diligently with private industry in the development of U.S.-flag chemical waste incinerator ships. I support their efforts and the overall goals of the Interagency Program.

Sincerely,

Drew Lewis

October 5, 1981

The Honorable Drew Lewis
Secretary
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Attn.: Mr. Mark Knouse
Exec. Assistant
Room 10200

Dear Mr. Secretary:

This is to express the appreciation of The American Eagle Foundation for the common-sense approach being taken by the Interagency Review Board for the Chemical Waste Incinerator Ship Program. The program has to do with the development, in the United States, of a capability to destroy, far at sea and aboard ship, very hazardous and toxic chemical wastes.

This Foundation is the national environmental organization that was appointed on August 23, 1973, by Hansa Line, Bremen, West Germany (the then owners of the foreign flag incinerator ship M/T VULCANUS), as their United States environmental representative for the first incineration at-sea project in America.

We were pleased to have been invited by a co-chairman of the Interagency Review Board to present a paper on September 23, 1981, to members and guests of the Chesapeake Section of the Society of Naval Architects and Marine Engineers, on ocean incineration. Included is a copy of our presentation on May 13 to the Interagency Collaborative Group On Environmental Carcinogens, Bethesda, Maryland on this same general subject.

The participation by government and industry in development of a fleet of chemical incinerator tankships can serve to help resolve a national problem which faces every American and this Administration.

Sincerely,

Donald D Carruth

Donald D. Carruth, President
The American Eagle Foundation
3306 Winnett Road
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(Tele.: A/C - 301 - 652 - 8910)

THE AMERICAN EAGLE FOUNDATION
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DONALD D. CARRUTH
PRESIDENT

WILLIAM G. ALLEN
VICE PRESIDENT

September 23, 1981

Statement by Donald D. Carruth
President
The American Eagle Foundation
to the members and guests of

The Chesapeake Section of the
Society of Naval Architects and Marine Engineers

It is a privilege to be afforded an opportunity by the Society of Naval Architects and Marine Engineers for the American Eagle Foundation to present our comments in support of the development, in the United States, of the capability to destroy large quantities of hazardous and toxic chemical wastes by high-temperature, controlled, incinerator tankships.

The American Eagle Foundation is the national environmental organization that was appointed on August 23, 1973, by Hansa Line, Bremen, West Germany (the owners of the foreign flag incinerator ship M/T VULCANUS), as their United States environmental representative for the first incineration at-sea project in America.

In February 1973 this Foundation became actively interested in the operations of the VULCANUS in the North Sea. We obtained detailed monitoring reports from the governments of France and The Netherlands, showing the results of their findings concerning the capability of the VULCANUS to effectively destroy European generated hazardous wastes.

The American Eagle Foundation entered into extensive negotiations with the U.S. Coast Guard, Hansa's subsidiary (Ocean Combustion Services, BV, Rotterdam, The Netherlands), and Germanischer Lloyd regarding necessary modifications to the ship while it was still in Europe. This was necessary in order for the Coast Guard to issue a Letter of Compliance to the owner of the ship for loading and carriage from United States ports authorized cargoes of "Herbicide Orange" and "chlorinated hydrocarbons".

The VULCANUS arrived in the United States on September 27, 1974 and docked near the Shell Chemical Company facility at Deer Park, Texas.

Thereafter, it loaded from Shell four shiploads (nearly 16,800 metric tons) of organochlorine wastes and transported this cargo into the Gulf of Mexico's western incineration zone. The U.S. Environmental Protection Agency was in charge of extensive monitoring operations for the first two shiploads of waste cargo.

In EPA's July 1975 report: "Disposal of Organochlorine Wastes By Incineration At Sea", the agency noted:

> "The findings indicate that more than 99.9 percent of the wastes were oxidized. Marine monitoring surveys indicate that there were no measurable increases in concentrations of trace metals and organochlorides in the water and marine life."

In 1977, about 100 miles West of Johnston Island in the Pacific Ocean, the VULCANUS destroyed three shiploads of "Herbicide Orange" (2,300,000 gallons plus drum washings), which consisted of all the residual stores of the U.S. Air Force. The average destruction efficiency to TCDD (dioxin), the toxic component of "Herbicide Orange", was 99.93 percent.

We now recognize and accept the fact that so-called "disposal" of incinerable hazardous chemical wastes by dumping in landfills, deepwell-injection, spreading over open ground, or storing should no longer be considered as an alternative to incineration since destruction of these wastes is essential to protect the public health and the environment. Advantages of incineration at sea include, but are not limited to, the following:

1. It will assist government and industry to rapidly draw down their long-time storage of chemical wastes.
2. It removes the destruction site from populated areas.
3. It is cost-effective when compared to other ultimate disposal techniques for the destruction of large volumes of chemical wastes.

The safe and rapid destruction of hazardous waste is recognized as one of our national priorities. The time is rapidly approaching when we no longer can afford the luxury of unlimited studies and theoretical approaches to the disposal of chemical wastes. We are now faced with the critical need for waste destruction technologies.

In a unified effort, both government and industry need to support at-sea incineration as a proven technique for destroying a substantial portion of America's hazardous chemical wastes.

THE AMERICAN EAGLE FOUNDATION

Industry and government should continue to establish and refine requirements for assuring that the design, construction, operation and maintenance of incinerator ships and their related transport and support facilities are as safe as possible, and that the ultimate destruction of hazardous chemical wastes far at-sea is conducted in a timely and efficient manner. The experience and competence of the members of the Society of Naval Architects and Marine Engineers can assist in this national effort.

The American Eagle Foundation wishes to express its appreciation for the opportunity to be with you this evening and to submit our comments.

Donald D. Carruth
Donald D. Carruth
President

William G. Allen
William G. Allen
Vice President

Statement by Donald D. Carruth
President
The American Eagle Foundation
to the members and guests of

The Interagency Collaborative Group
On Environmental Carcinogens,
Landow Building, Bethesda, Maryland

May 13, 1981

Mr. Chairman:

It is a privilege to be afforded an opportunity by this group for the American Eagle Foundation to present our comments in support of the development, in the United States, of the capability to destroy large quantities of hazardous and toxic chemical wastes by high-temperature, controlled, incinerator tankships.

Our Foundation is a national environmental organization that was appointed on August 23, 1973 by Hansa Line, Bremen, West Germany, the owner of the M/S Vulcanus, as their United States environmental representative for the Vulcanus incineration project for America.

In February 1973 this Foundation became actively interested in the operations of the M/S Vulcanus in the North Sea area of Europe; its home port was Rotterdam. We obtained detailed monitoring reports from the governments of France and The Netherlands showing the results of their findings concerning the validity of the Vulcanus to destroy European generated hazardous wastes.

In November 1973 meetings were held in our office attended by Dr. Kenneth D. Johnson and Mr. Howard B. Brown of the Chemical Manufacturers Association and representatives of Ocean Combustion Service, B/V, Rotterdam (the affiliate of Hansa that operated the Vulcanus). The CMA personnel were most helpful, but did not attend technical sessions with the Coast Guard and us.

The American Eagle Foundation entered into extensive negotiations with the U.S. Coast Guard, the Vulcanus' owner, Ocean Combustion Service and Germanischer Lloyd regarding necessary modifications to the vessel while it was still in Europe. This was necessary in order for the Coast Guard to issue a Letter of Compliance to the owner of the vessel for loading and carriage from United States ports of authorized cargoes of "Herbicide Orange" and "chlorinated hydrocarbons".

The Vulcanus came to America and docked on September 27, 1974 near the Shell Chemical Company facility at Deer Park, Texas. Thereafter, it loaded from Shell four shiploads (nearly 16,800 metric tons) of organochlorine wastes and transported this cargo into the Gulf of Mexico's western incineration zone, where it was burned at high temperature in the ship's incinerators. The U.S. Environmental Protection Agency was in charge of extensive monitoring operations for the first two shiploads of waste cargo.

In EPA's July 1975 report titled: "Disposal of Organochlorine Wastes By Incineration At Sea", the agency noted:

> "The findings indicate that more than 99.9 percent of the wastes were oxidized. Marine monitoring surveys indicate that there were no measurable increases in concentrations of trace metals and organochlorides in the water and marine life."

in year 1977 the Vulcanus destroyed three shiploads of Herbicide Orange (2,300,000 gallons plus drum washings), which was all of the residual stores of the U.S. Air Force, about 100 miles west of Johnston Island in the Pacific Ocean. The average destruction efficiency to TCDD (dioxin), the toxic component of Herbicide Orange, was 99.93 percent.

The safe and rapid destruction of the approximately 57 million metric tons of hazardous wastes which EPA estimates will be produced in the United States in year 1980, should be one of the national priorities for America.

NOTE

In the June 6, 1980, written testimony of Dr. David P. Rall, Director, National Institute of Environmental Health Sciences, Department of Health and Human Services, to a Senate Judiciary Committee hearing included, among others, the following statement:

> "The ideal way to protect people from health problems due to chemical exposure is to identify the chemical and study the toxicity of the chemical in laboratory animals before exposure. This has historically been an effective way of projecting certain health problems from single chemicals. However, some of these studies take many years and are inadequate for predicting effects such as neurobehavioral and reproductive damage. We in the National Toxicology Program in HHS are trying to develop better, less expensive and more rapid test methods to identify accurately these effects."

> "One research area that is not adequately developed concerns the toxicity of many chemicals acting together. We do not have the scientific tools today to estimate the toxic effects of 12, 24 or 36 chemicals to which a person may be exposed simultaneously. This is the problem in Love Canal where residents were exposed to not a dozen, but to perhaps two or three dozen, or more chemicals at the same time. The best we can do at this time is examine the toxicity of single chemicals and project human health effects. Because today we cannot generalize about the toxic effects of multiple chemical exposure, it is almost impossible to estimate the health impacts of such exposure other than to assume that they are simply addictive."

In the 1970 Report to the Surgeon General: "Evaluation of Environmental Carcinogens", prepared by the Ad Hoc Committee on the Evaluation of Low Levels of Environmental Chemical Carcinogens, National Cancer Institute, notes in its Recommendations, item 8:

> "A basic distinction should be made between intentional and unintentional exposures.
>
> a. No substance developed primarily for uses involving exposure to man should be allowed for wide-spread human intake without having been properly tested for carcinogenicity and found negative.
>
> b. Any substance developed for use not primarily involving exposure in man but nevertheless resulting in such exposure, if found to be carcinogenic, should be either prevented from entering the environment or, if it already exists in the environment, progressively eliminated."

In the Sixth Annual Report of The Council on Environmental Quality, dated December 1975, Chapter 1: "Carcinogens in the Environment", notes that chemicals introduced into our environment by our consumption pattern and way of life, can cause cancer; and that much of the cancer is probably associated with carcinogenic agents produced by man.

We are now coming to recognize and accept the fact that mere "disposal" of hazardous and toxic chemical wastes by dumping in land fill, well injection, spread of material over open ground, and storage should not be concluded to be feasible alternatives to ocean incineration since there has been no demonstrated destruction efficiency factor stipulated for these alternatives where "disposal" of such chemical wastes are concerned.

It should be noted that neither government nor industry is capable of reproducing in their laboratories the scope of tremendous pressures exerted by Nature on the earth's "fragile crust". Of the many millions of tons of hazardous and toxic chemical wastes dumped into land injection wells each year in the United States, there are no data which have been made available to this Foundation to show that groundwater in the general area of of the injected waste cannot eventually be contaminated by such wastes.

The proven technique for destroying incinerable chemical wastes by high-temperature controlled incinerator tankships operating far at sea -- and away from masses of people -- is probably the safest method available to government and industry for the destruction of those chemical wastes that contribute to the causing of cancer and malformations in the human body. When we speak of high-temperatures we mean the capability of the vessel to sustain temperatures up to and including 1,650° C in each incinerator unit.

America should give no less consideration to overcoming the detrimental effects caused by a ravaging deadly disease which attacks America's human resources than it does to the destructive effects of a hurricane or other disaster. The same effort of dedication by the government should apply to resolving both types of problems.

Finally, it may be of interest that the following is the last paragraph in an April 17, 1974 letter from the Research and Development Department of a large chlorocarbon manufacturer in the United States to a representative in New York of the M/S "Vulcanus":

> "We believe that a long-term disposal service operating out of U.S. ports, such as you now provide for European customers, might satisfy a real need of North American industries, and we hope that you will find it attractive to eventually establish such a service."

Our Foundation wishes to express its appreciation for the opportunity to be with you today and to submit our comments.

Donald D. Carruth

Submitted by: Donald D. Carruth
President
The American Eagle
Foundation
3306 Winnett Road
Chevy Chase, Md. 20015
(Tele.:A/C-301-652-8910)

Exhibit - B

U.S. Department of
Transportation

Office of Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Friday, April 16, 1982

MAR 06-82
Contact: Walter Oates
Tel.: (202) 426-5807

LOAN GUARANTEE AIDS INCINERATOR SHIP CONSTRUCTION

Admiral Harold E. Shear, USN (Ret.), who heads the Maritime Administration, today announced the agency's conditional approval of an application for a Federal guarantee of a loan to finance the construction of two U.S.-flag ships designed to incinerate hazardous chemical wastes at sea.

The ships will be built by the Tacoma Boatbuilding Company of Tacoma, Wash., under a $74.5 million contract from the Apollo Company of Lake Success, N.Y. The government guarantee, authorized under Title XI of the Merchant Marine Act of 1936 and subject to final MarAd approval of the company's financing arrangements, would cover $55,875,000, equivalent to 75 percent of the construction cost.

In announcing the Title XI guarantee, Admiral Shear said:

"The United States currently faces a very serious hazardous waste problem. Incineration at sea aboard specially designed and equipped ships has been determined to be a cost-effective, technically efficient, and environmentally acceptable technology for the destruction of many types of combustible hazardous wastes.

"This project will provide a much-needed alternative for the destruction of large volumes of hazardous waste. These ships will have the capability to incinerate such wastes safely at sea, far removed from population centers, at destruction efficiencies of 99.99 percent."

The Apollo Company is a limited partnership in which Leo V. Berger and Peter Constas hold a controlling interest. Apollo will operate the vessels under a time-charter agreement with At-Sea Incineration, Inc., of Greenwich, Conn., a wholly owned subsidiary of Tacoma Boatbuilding Company. The charter agreement covers an eight-year and 11-month term.

The vessels will be managed by Apex Marine Corporation which is wholly owned by Apex Resources, which, in turn is wholly owned by Mr. Berger and Mr. Constas.

- more -

Each of the two vessels will have a length of 375 feet and accommodate 6,200 tons of waste materials. Each ship will have two liquid injection incinerators with a combined processing rate of 20 tons per hour. Similar incinerators have effectively destroyed hazardous chemical wastes during incinerator ship operations over the last decade in both Europe and the United States. The ships will conduct their operations at Federally designated incineration sites, approximately 150 miles from shore.

The project is expected to begin operations in early 1984. It has been closely coordinated with the Federal government's Interagency Review Board for the Chemical Waste Incinerator Ship Program, as well as the American Bureau of Shipping. The Interagency Review Board, consisting of representatives from the Environmental Protection Agency, MarAd, the Coast Guard, and the National Bureau of Standards, is responsible for coordinating all Federal government activities related to incineration at sea.

# # # # #

Exhibit - C

Incineration at sea—are the odds now in favor?

Moves are afoot to build up U.S. capacity for shipboard incineration of hazardous materials. Tight rules governing the landfilling of such wastes, and the rising public opposition to land incinerators, are fueling the trend.

☐ The ultimate answer for hazardous chemical wastes—e.g., chlorinated organics—in the U.S. is getting to be a choice between burning them on land or at sea. Although there's a good amount of land-based incinerator capacity in the planning stages, it's the oceangoing incinerators that are making the headlines these days. Consider the following:

- At presstime (early March), the U.S. Dept. of Commerce's Maritime Administration is getting ready to approve the first loan guarantees for the construction of incinerator vessels—two U.S.-flag ships* announced earlier this year (*Chem. Eng.*, Jan. 25, p. 18). Maritime will guarantee loans covering up to 75% of the cost ($63 million) of the ships, to be completed by the end of 1983 by Tacoma Boatbuilding Co. (Tacoma, Wash.). The firm will use incineration technology supplied by At-Sea Incineration, Inc. (Greenwich, Conn.)—a company that it recently bought.
- Chemical Waste Management Inc. (Oak Brook, Ill.), which owns and operates the only incinerator-ship now navigating U.S. waters (*Vulcanus I*), has announced that another ship (*Vulcanus II*) that will ultimately replace its current one is under construction in West Germany, and probably will be completed by November.
- The U.S. Environmental Protection Agency's Marine Protection Branch, which some years ago chose a site in the Gulf of Mexico as a burn area, is in the process of redesignating the site and selecting another one—this time in the North Atlantic. In addition, says a spokesman, a "well known" West Coast firm that wants to get into ocean-based burning has asked the agency to designate a burn site in the Pacific Ocean.

U.S. SUPPORT—If ocean-based incineration has a brighter future now, it is due partly to the continuing support of four agencies—EPA, Maritime, the U.S. Coast Guard and the National Bureau of Standards—that banded together about two years ago to create an ad hoc work group.

This organization has now evolved into the Interagency Review Board for the Chemical Waste Incinerator Ship Program.

Convinced that there's plenty of room for burn facilities both on land and at sea, the interagency board has managed to keep alive the Carter Administration's enthusiasm for incinerator vessels.

"Things have slowed down a bit because of the transitional period," says Daniel Leubecker, acting chief of the division of environmental activities at Maritime, "but the present Administration still has a substantial commitment to ocean-based burning, and to establish a sizable U.S. incinerator-ship capability."

Adding that the approval of loan

---

*A U.S.-flag ship flies the national flag; its crew members are U.S. citizens. Almost always built in the U.S., such vessels are certified by the U.S. Coast Guard and the American Bureau of Shipping.

MARAD NOW IN
U.S. DEPT. OF TRANSPORTATION.

guarantees* for ships has "high priority" within Maritime now, Leubecker notes that such decisions are made after a review process during which EPA, Maritime and the Coast Guard study detailed specifications and drawings of the proposed vessels. Maritime also evaluates "the entire economic package" before saying yes.

U.S.-flag ships functioning as incinerator vessels will be subject to stringent requirements stipulated by the agencies. The Coast Guard and Maritime will have primary control over ship design, construction and equipment. EPA will preside over the design and operation of the incinerator system, and enforce rules covering waste burning at sea.

Also, waterfront terminals for receiving, storing, processing and loading wastes onto the incinerator vessels will be subject to rules set by EPA, the U.S. Dept. of Transportation, and state and local authorities.

BURNING TECHNIQUE—Although both Tacoma Boatbuilding and Chemical Waste Management refuse to discuss details relating to number and identity of clients, volume of business to be handled by the new ships, and plans for waterfront terminals,† it is common knowledge that the planned vessels will use incinerators built according to a design by H. Saacke KG (Bremen, West Germany).

A liquid-injection system, the Saacke incinerator has already been in operation aboard the *Vulcanus I* for at least a decade and, according to EPA's Gerald Chapman, cochairman of the interagency review board, is the only system approved for use in the U.S., because there is no other that meets current specifications.

Donald A. Oberacker, an expert in incinerator design with EPA's Industrial Environmental Research Laboratory (Cincinnati), says that the agency's evaluation of current designs, made with help from TRW, Inc. (Redondo Beach, Calif.), has determined that liquid-injection systems are the most effective in incinerating liquid wastes at high feedrates (10-20 metric tons/h). And, save for rotary kilns, they are the only ones capable of sustaining the temperatures (up to 1,600°C) required for a highly efficient destruction of such toxic materials as polychlorinated biphenyls and dioxins.

Comparison of incinerators for shipboard use

	Incinerator type						
	Liquid injection	Rotary kiln	Fluidized-bed	Molten salt	Multiple hearth	Multiple chamber	Starved air
Waste capability:							
Pumpable liquids	X	X	X	X	X	X	X
Slurries, sludges		X	X	X	X		X
Tars		X		X	X		
Solids:							
Granular		X	X	X	X		X
Irregular		X				X	
Containerized		X				X	
Maximum operating temperature, °C	1,600	1,600	[illegible]	[illegible]	1,100	1,000	820
Maintenance requirements	Low	Medium	Medium	Medium	High	Medium	High
Commercial applications to date	Widely used, liquid wastes	Widely used, all wastes	Limited use, sludges organic wastes	Demonstration tests only	Widely used, sewage sludge	Widely used, refuse	Resource recovery

Source: EPA, Industrial Environmental Research Laboratory

Installing a rotary kiln on board would allow an incinerator vessel to burn solid wastes, too, but these units have yet to be proven in operation. EPA, says Oberacker, has recommended that the kilns be tested, and has even considered funding such research, but the prospects for getting the money are not good in view of the Reagan Administration's passion for thrift.

On board, a rotary kiln would need more support, and perhaps some design changes would be called for in order to withstand the vibration, pitch and roll of the ships. Such units are, of course, common fixtures in land-based incinerator facilities.

LAND VS. OCEAN—While stressing that the drive to build U.S. incinerator-vessel capability will not preclude the need for land-based facilities, spokesmen for the interagency review board say that there are no up-to-date data comparing the economics of both kinds of incineration.

EPA's Chapman is one who believes there's a need for both types of businesses. "The volume of hazardous wastes is too great, and the requirements are also great. Land incinerators are very limited in capacity, and you can't burn large waste volumes on land as you can at sea. Ship capacities are greater; you can burn 800,000-900,000 gallons in ten days if you have to."

"At this point," he adds, "there's no competition, so a shipowner can set his own price for burning hazardous wastes. Of course, the prices will come down when there are several vessels in operation."

Gary Dietrich, director of EPA's Office of Solid Wastes, also believes that the U.S. should burn both on land and at sea. "We probably need the latter option to deal with 'political wastes,' that is, such dangerous substances as Agent Orange and PCBs, which the public doesn't want to see burned on land."

A PLUS FOR SHIPS—Judging from the mounting opposition to land-based facilities, there isn't much that the public wants to see burned on land these days. Talking about public resistance to incinerators, Fred Wynn, vice-president for facility development with SCA Chemical Services Inc. (Boston), admits it's a problem. "Today," he says, "it's hard to site anything—it's a sign of the times."

This includes waterfront terminals for oceangoing incinerators, he notes, adding that they, too, can expect to run

*Chemical Waste Management has not applied for loan guarantees for the *Vulcanus II*. However, the ship must receive at least conceptual approval from EPA and the Coast Guard before it can operate in U.S. waters.

†A fact sheet circulated among several stock brokerage houses says that the Port Authority of New York and New Jersey will build—and lease to At-Sea—a dockside terminal and laboratory on an already chosen site in New Jersey, at a cost of $25-$30 million. If siting permits are granted, the completion date is slated for late 1983.

into tough local opposition. Wynn's opinion is shared by Robert Fox, general manager of IT Corp.'s Enviroscience Div. (Knoxville, Tenn.), which designs land-based facilities.

The company, which had expected last year to begin construction of the U.S.'s largest hazardous-chemical-waste disposal plant, at Burnside, La. (*Chem. Eng.*, Jan. 12, 1981, p. 21), still awaits an EPA permit. Fox says that the permit may be granted this summer or fall; even if it is, the permitting process will have lasted more than two years.

Another incinerator—part of an integrated waste-handling facility to be built in the East Texas/Gulf area—also has been delayed "quite a bit," according to Fox. The first site chosen was adjacent to the Ellington Air Force Base in the Houston area, but a change to Bayport was forced by local opposition to the project. IT Corp., notes Fox, has not yet applied formally for an EPA permit.

The firm also has proposed building an incinerator facility in Massachusetts, but has still to find a town that would support the project.

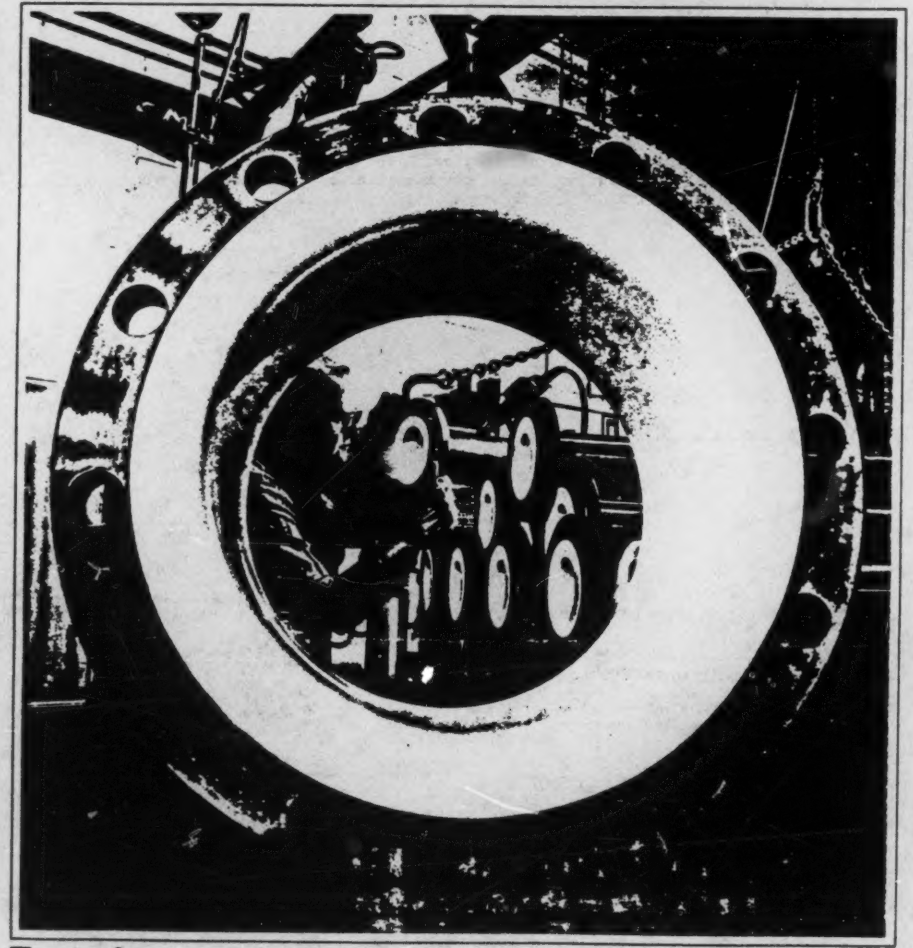
SCA Chemical Services, which is currently building what it calls "the country's largest hazardous-wastes incinerator," in Chicago, still hasn't decided whether to apply for a permit to burn PCBs there, even though the facility, according to Wynn, will be able to burn "any kind of incinerable hazardous waste," and is designed to meet the most stringent regulations.

And the firm hasn't yet applied for a permit to burn PCBs at a new liquids incinerator that it hopes to start building this summer in Newark, N.J. "Local opposition could be heavy," notes Wynn. It has already been heavy for other SCA projects proposed for Memphis, Tenn., and Charlotte, N.C. The permitting process for those "is now in the courts," says Wynn.

Raúl Remírez

CHEMICAL ENGINEERING

INTERNATIONAL NEWS P. 20C
A McGRAW-HILL PUBLICATION
MARCH 22, 1982



Focusing on plastic-lined pipe

Exhibit - D 1

MANFRED BRAUN
GENERAL REPRESENTATIVE U.S.A.
HANSA LINE, BREMEN

August 23, 1973
MB/jat

American Eagle Foundation
1729 "H" Street N.W.
Washington, D.C. 20006 (*)

Reference: "VULCANUS" Project

This will confirm that the American Eagle Foundation, a national environmental organization, is the environmental representative in the US for the MV "VULCANUS" incineration project.

Very truly yours,

M. Braun

Manfred Braun

(*) Present address: The American Eagle Foundation
3306 Winnett Road
Chevy Chase, Maryland 20015

(Telephone: A/C-301-652-8910)

TELEPHONE: (A/C 301) 652-8910

DONALD D. CARRUTH
PRESIDENT
THE AMERICAN EAGLE FOUNDATION
(A NATIONAL ENVIRONMENTAL ORGANIZATION)

3306 WINNETT ROAD
CHEVY CHASE, MARYLAND ~~20015~~-20815

Rc034

RES.: [illegible] CUSTER ROAD, BETHESDA, MD. [illegible]
(301) [illegible]

WILLIAM G. ALLEN
VICE PRESIDENT

THE AMERICAN EAGLE FOUNDATION

21 WEST STREET, NEW YORK, N. Y. 10006 • TELEPHONE 425-6100 • TWX 710-581-5867

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Exhibit - D 2

May 15, 1973

Mr. Donald D. Carruth, President
The American Eagle Foundation
Suite 300, 1729 H Street NW
Washington, DC 20006

Dear Mr. Carruth:

Thank you very much for your 'phone call. I have since received the information we discussed.

You and The American Eagle Foundation are to be commended. Expert testimony presented rationally by conservationists is sorely needed by business, government and the public. While yours is not an enviable position -- being open for "pot shots" from both sides of the environmental issue -- it seems now to be the most reasonable.

I am interested in learning more about The American Eagle Foundation. Can you supply me background information, history, etc.? I would appreciate it.

Sincerely yours,

Gene Kliewer

Gene Kliewer
Special Projects Editor

GK/ic

HOUSTON NEW ORLEANS GALVESTON

Lykes Bros. Steamship Co., Inc.

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NEW YORK
WASHINGTON
ANTWERP
BREMEN
DURBAN
GENOA
HONG KONG
LONDON
ROTTERDAM
TOKYO

Exhibit - D 3

SWT-390-74

Lykes Center
300 Poydras Street
New Orleans, Louisiana 70130

5 August 1974

The American Eagle Foundation
Suite 300
1729 "H" Street, N.W.
Washington, D. C. 20006

ATTENTION: Mr. Donald D. Carruth
PRESIDENT

Gentlemen:

As per your request at our recent meeting in New Orleans, the following is a list of Lykes personnel who we would like to have visit the VULCANUS while she is in Houston, Texas on or about 20 August 1974.

M. G. Bulloch, Jr. Senior Vice President
(or his designated representative)

J. Bernstein, Jr., Vice President, Maintenance & Repair Division

J. F. Ohman, Manager, Maintenance & Repair Division

Capt. E. B. Hendrix, Vice President, Marine Division

A. C. Taylor, Manager, Sea-Going Labor Relations Division

R. S. Campbell, New Construction Division

Since Jim Amoss will be back shortly before 20 August, he may also have someone he wants to go aboard. If so, we will advise you at a later time.

Yours very truly,

LYKES BROS. STEAMSHIP CO., INC.

S. W. Thayer
VICE PRESIDENT - ENGINEERING

Exhibit - D 4

THE AMERICAN EAGLE FOUNDATION
~~[illegible] WASHINGTON, D.C. 20006. A/C [illegible]~~
Suite 702, 1911 North Fort.Myer Drive, Arlington, Va. 22209
A/C (202)-298-6642

DONALD D. CARRUTH
PRESIDENT

WILLIAM G. ALLEN
VICE PRESIDENT

September 18, 1974

Captain Carroll T. Newman
Chief, Marine Safety Division
U.S. Coast Guard
New Customshouse
New Orleans, Louisiana 70130

Attn.: Cmdr. James I. McLeish

Dear Captain Newman:

Included for your information and files are the following items which I discussed today with Cmdr. McLeish:

1. Copy of 16 Sep 1974 "Letter of Compliance", issued by Headquarter's Office, USCG, re MTS Vulcanus.
2. Copy our telex of 17 Sep 1974 to Ocean Combustion Service B/V, Rotterdam re "Letter of Compliance".
3. Copy of data re request of Mr. John J. Nachtsheim, Assistant Administrator for Operations, MarAd, for which approval was granted Captain George C. Steinman, Chief of MarAd's Environmental Activities Group, to board and survey the Vulcanus in the Port of Houston area.
4. Copy of the French Environmental Agency of the Pollution and Nuisance Prevention Administration's report: "Incineration of Industrial Chlorine Wastes on the High Seas". Translation of the French language report to English was made through the cooperation of the U.S. Air Force. As noted on page 7, the basis for the report took place off Rotterdam between 19-22 April 1974.
5. Summary and Conclusions of a "Report To Congress On Hazardous Waste Disposal", by the U.S. Environmental Protection Agency, June 30, 1973.

We appreciate the interest of yourself and members of your staff in the Vulcanus project for the destruction of hazardous/toxic chemical wastes at sea by high-temperature incineration.

Sincerely yours,

Donald D. Carruth

Donald D. Carruth

CCA Container Corporation of America

1100 Connecticut Avenue, N.W.
Washington D.C. 20036

Phone: 202 463-7470

April 26, 1982

Comments to the

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

on

Reauthorization of the Resource Conservation and Recovery Act

by

Container Corporation of America

COMMENTS TO THE ENVIRONMENTAL POLLUTION SUBCOMMITTEE SENATE ENVIRONMENT AND NATURAL RESOURCES COMMITTEE ON REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

Container Corporation of America is pleased to submit comments on the reauthorization of the Resource Conservation and Recovery Act. This statement is also presented on behalf of the American Paper Institute.

As the nation's largest consumer of recyclable paper, Container Corporation last year processed almost one million tons of recyclable paper at thirteen mill locations in the United States, eleven of which depend exclusively on recyclable paper as their raw material.

In the paper and paperboard industry as a whole there are about 350 mills which processed a total of 16 million tons of recycled paper last year, and 2 million tons were collected for export. This 18 million ton level, representing a 50 per cent increase in collections over the last decade, accounts for 26 per cent of all paper and paperboard used in this country.

The purpose of our statement is two-fold: 1) to alert the committee to solid waste management policies, promoted under Subtitle D of RCRA, which pose a threat to the existence of the paper recycling industry; and 2) to request the adoption of technical amendments to RCRA which clarify the original intent of Congress that materials recovery or recycling should be an integral part of state solid waste planning.

Solid waste management policies at the state and local level are being developed which may curtail or even deny paper recyclers access to their sources of supply. These policies, known as "flow control", may be adopted where energy recovery from waste is advanced as a solution to the solid waste management problem. "Flow control" gives the local government exclusive authority over the disposal of municipal solid waste, thereby permitting the diversion of all waste to the waste-to-energy facility. If these policies make no distinction between municipal solid waste and recyclables, paper recycling may be severely impacted. Recyclable paper, in our opinion, is an industrial raw material with established values and markets which has historically traveled in interstate commerce and should not be lumped together with waste that is discarded and not recycled.

We believe that Congress did not intend that private markets for recyclable materials or recoverable materials should be replaced by municipal control. Indeed, under the objectives (Section 1003) of Substitle D of RCRA, Congress called for "a cooperative effort among the Federal, State and Local governments and private enterprise in order to recover valuable materials and energy from solid waste." (Emphasis added).

Congress further recognized that the recovery and conservation of recovered materials can reduce the dependence of the U.S. on foreign resources and reduce the deficit in its balance of payments. (Section 1002(c)(3)). In fact, recyclable paper is a world commodity of which the U.S. is the major exporter.

Further evidence of the fact that Congress intended materials recovery as well as energy recovery to be an integral part of solid waste management appears in other Subtitle D sections of RCRA. For example, the Act directs that markets for recovered materials be studied and developed (Section 5003); and mandates that federal agencies, as well as states using federal funds, procure materials composed of the highest percentage of recovered material "practicable". (Section 6002).

Excerpts from the House Committee report also confirm congressional intent that materials recovery is a clear objective. It states:

> The Committee recognizes that the *most effective approach for alleviating the problems created by discarded materials is a comprehensive discarded materials management approach*. Such an approach includes the use of techniques to recover the *greatest amount of energy and materials possible from discarded materials;* reduce waste residuals to a minimum, and provide for an environmentally sound disposal of the remainder, principally through sanitary landfill. (Emphasis added).

It is clear from the objectives and legislative history of RCRA that Congress sought to establish a balance between materials and energy recovery in the management of solid waste.

As we noted earlier, however, in response to this RCRA mandate, some state and local solid waste planning efforts have promoted energy recovery to the exclusion of recycling. In part this problem has been caused by the fact that Subtitle D, which spells out the parameters of the state plans, does not refer to the terms "recovered materials" or "materials recovery." Consequently, the emphasis on state planning efforts has been on energy recovery from waste and not materials recovery. Such an emphasis could inadvertently cause a reduction in materials recovery with additional materials being burned for their energy value rather than recovered for their material value.

In order to clarify the intent of Congress under RCRA with respect to material recovery and to assure balance in solid waste management planning between recycling and burning, we request the following technical changes be made to RCRA.

1. Amend Section 4003(a)(2) of RCRA by inserting the following after the words "resource recovery" and before "or (B)":

", including private recycling of recovered and recoverable materials."

2. Amend RCRA Section 1004(27) the definition of solid waste by striking the period at the end thereof and inserting the following"

", or recovered materials."

3. Amend Section 4003(a)(5) of RCRA by striking out the period at the end thereof and inserting the following:

> "; provided however that the plan shall further provide that no state or local government shall interfere with, restrain, or prohibit any individual's access to recovered or recoverable materials."

These amendments would help to clarify the intent of Congress that a comprehensive solid waste management plan should include the use of techniques to recover the greatest amount of energy and materials possible from discarded materials. We believe energy recovery and materials recovery are compatible, but that neither should be advanced to the exclusion of the other.

The need to clarify congressional intent on the importance of materials recovery to comprehensive solid waste management planning is particularly urgent in light of a recent court decision addressing the legality of municipal control of solid waste including recyclables. In this case, Akron v. Hybud Equipment Company, the U.S. Court of Appeals (6th Circuit) addressed the policy question of whether "private markets should be replaced by municipal control of recyclable wastes." The court held that:

> "The policy question here, in our judgment, is debatable and should not be taken out of municipal hands by federal courts in the absence of congressional intent clearly expressed."

We believe that the reauthorization of RCRA presents the Congress with an opportunity to clearly articulate such a policy and reaffirm its intent that solid waste management planning strike a balance between energy and materials recovery.

REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

THURSDAY, JUNE 24, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, D.C.

The committee met at 1:18 p.m., in room 4200 Dirksen Senate Office Building, Senator John H. Chafee presiding.

Present: Senators Chafee and Gorton.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Ms. Lavelle, we welcome you here today, and I welcome everybody to this hearing.

I have to be at the Finance Committee very shortly. Senator Gorton will be here to take over.

The purpose of the hearing this afternoon is to hear testimony on issues relating to the reorganization of the Solid Waste Disposal Act as amended by RCRA in 1976.

On April 26 of this year, this subcommittee heard testimony on reauthorization RCRA. On May 6, the Committee on Environment and Public Works reported a bill authorizing $88.6 million for the RCRA program for fiscal years 1983-84.

The purpose of our hearing today is to further examine the issues and to consider the need for legislative changes to fine tune the RCRA Act.

We will focus on five issues today, but others will be brought up because of specific concerns of our witnesses.

In response to the provisions in the RCRA bill reported out of the House Energy and Commerce Committee, the Senate Subcommittee will reach a decision on whether substantive changes to RCRA are necessary or desirable.

We have a long witness list and a lot of testimony here today, so I would like to urge each of our witnesses to be brief in their remarks and give us ample opportunity to ask questions.

I have had indications that a number of other witnesses asked to testify, but could not be accommodated, and I would ask anybody who wishes to do so to submit statements for the hearing record, which will be open until July 9.

I would like to welcome and extend our greetings to Ms. Rita Lavelle and Marguerita Hindle who are here from Rhode Island.

Ms. Lavelle, go ahead.

STATEMENT OF RITA M. LAVELLE, ASSISTANT ADMINISTRATOR; SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY PETER PEREZ, MICHAEL COOK, AND LaMAR MILLER

Ms. LAVELLE. Thank you.

I would first like to introduce the people here. To my left is Mr. Peter Perez, Assistant Policy Planner to the Assistant Administrator for Water.

To my immediate left, Michael Cook, in Solid Waste; and to my right, Mr. LaMar Miller, Acting Director for Waste Program Enforcement.

Again, Mr. Chairman, we appreciate the opportunity to address the committee and to express our support for the fiscal year 1983 appropriation authorization as proposed in the Administrator's letter of February 23, and in addition to commenting on H.R. 6307 with several additional amendments to it.

Mr. Chairman, we are taking a position on every single amendment, so I would ask you to be patient, we will try to cut down our testimony as much as possible.

Senator CHAFEE. I think it is important to hear your testimony, so you go to it, Ms. Lavelle.

Ms. LAVELLE. Thank you very much.

The Administrator very much appreciates the direction and support we have received from the Congress in development of our hazardous waste regulatory program. We share with the Congress the paramount goal of protecting human health and the environment, and our RCRA goals coincide with yours; we differ only in the strategy for reaching those goals.

The Agency does believe, however, that it is extremely unwise to change the statute in any significant way at this time, when our RCRA activity is reaching its full capacity. The primary effect of changes now will simply be to make the program more difficult to administer.

As my testimony will demonstrate, EPA is moving expeditiously to implement rules in the areas addressed in the bill before you. After giving you a brief report on the progress of our regulatory program, I trust you will agree that the substantive amendments to RCRA in H.R. 6307 are not necessary.

Much of what is proposed is already being accomplished administratively. Other amendments are highly detailed and would seriously limit our flexibility. To the extent that some of the proposed amendments are inimical to our current objectives, they would require us to divert committed resources, thus impairing our ability to meet the overall objectives of the act.

We agree with the concept of other proposals if they are modified to give EPA more discretion or to clarify the congressional intent.

Before discussing the amendments and EPA's reasoning in more detail, permit me to review the progress the Agency has made in implementing RCRA directives. It is a record in which we take great pride.

The core regulatory program is near completion. Under our regulations, hazardous waste is carefully monitored through the generation, transportation, and ultimate disposal phases.

We have promulgated rules covering listing and identification of wastes, generators, and transporters in interim status, and procedural standards for issuing permits. Permitting standards have been issued for storage, treatment and incineration facilities.

On Monday of this week, we issued revisions to standards for incineration facilities.

Permitting for these facilities will now be accelerated. We also require full financial assurances for closer/postclosure costs, as well as liability insurance for treatment and disposal facilities.

In the near future, we will issue our land disposal regulations. With this final package in place, all major regulations under RCRA will have been completed.

Even as we near completion of RCRA's regulatory framework, we continue our pursuit of the Administrator's goals in the area of regulatory reform. To this end, all our regulations are now undergoing a degree-of-hazard analysis to determine whether the requirements need strengthening or whether they are already too stringent.

Complementing our efforts to implement RCRA, the States are demonstrating an eagerness to assure increased responsibility for the program. Thirty-two States have now been authorized to operate the program on an interim basis.

Full and final authorization for the States to operate the entire RCRA program will be provided shortly. We expect, in fact, that by early 1985 as many as 40 States will have final RCRA authorization.

The major focus of RCRA in the eighties will be on permitting hazardous waste facilities. We have already begun this permitting process. More than 400 permit applications from treatment and storage facilities have been called in and are now being evaluated. Nearly 50 permit applications for other types of hazardous waste facilities have come in voluntarily.

With the newly promulgated regulations, we will call in more applications shortly. The rate of permit issuance is expected to increase rapidly over the next several years.

An important part of the RCRA program is insuring that the facilities are operating in compliance with the laws and regulations. In partnership with the States, we have begun an aggressive administrative enforcement program to insure that facility operators are carrying out their RCRA responsibilities.

Under this program, and if you would refer to handout No. 1—under this program we have made more than 6,000 inspections and issued more than 400 orders in 1981.

We estimate that during fiscal year 1982, more than 15,000 facilities will be inspected, with nearly 35 percent of those inspections carried out by the States. Furthermore, to date EPA has issued 262 notices of violation and 141 compliance orders.

Senator CHAFEE. Ms. Lavelle, I am interested in these facilities that you have licensed—are they, some of them, quite sophisticated facilities?

The problem I have with what is happening is, it does not seem to me that the truly needed hazardous waste facilities are being created through a whole host of reasons, not the fault of EPA, but zoning problems and the State and local communities' resistance.

Are these landfill operations you mentioned incinerators.

Ms. **Lavelle**. Yes.

Senator **Chafee**. Obviously they are sophisticated, but how about others?

Ms. **Lavelle**. I think what you refer to is the lack of access to new technologies across the United States for treatment and ultimate disposal of hazardous waste. And yes, indeed, there is a problem.

What we have to do, and we have been moving very expeditiously to do that, is first come out with the regulations, once they are in place—and there is only one major problem, and that is land disposal—once we come out with the regulations, we will have in line the basic requirements for trying to obtain the permit, then comes the larger question, how does one go about getting a permit?

We have a number of solutions that we are trying to propose in this area, Mr. Chairman, and in my testimony I go in under section 4, and also in the last part where we talk about class permit, which is a concept we would like for this committee to examine and perhaps help us in our permitting efforts.

Senator **Chafee**. Well, why don't you go ahead and then I will ask questions at the end.

Ms. **Lavelle**. Thank you.

You have asked specifically about our program to regulate waste oil. Our extensive efforts in this area focus on gathering and analyzing information on hazardous constituents and contaminants in waste oil. Our research goal is to determine how these constituents and contaminants are released into the environment. By December 1982, EPA will have conducted a series of combustion test burns to determine the efficiency of different kinds of boilers when they burn waste oil.

Another key concern we will be addressing is the use of waste oil in road oiling. Through various methods, including laboratory testing, we will determine hw waste oil contaminants are released during road oiling, and how they move through the soil. By this investigation, we can evaluate the potential for ground and surface contamination from waste oil storage, recycling and disposal. Our investigation will be completed by next spring. Shortly thereafter, we will propose regulatory controls for waste oil.

Now if we are going to go through the amendments, I would like to refer you to the chart on your right.

H.R. 6307 authorizes appropriations. We have testified before this committee before, that the administration supports only those levels contained in the administration's bill that was forwarded to Congress February 23 of this year.

Now, the first major amendment is that affecting small quantity generators. As you are aware, this would require EPA to reduce the level for small quantity generator exclusion from 1,000 to 100 kilograms per month within 18 months.

In the same time frame, we would be required to issue standards for generators between these levels. These standards may vary from the requirements for larger generators, but the committee report on the bill states that the standards must be consistent for both large and small generators.

EPA could support this amendment only if it were modified to provide more discretion for the Administrator. We already have the authority to reduce the level of exclusion, but have not decided as yet to exercise it. We strongly prefer to make this reduction on our own schedule.

We continue to believe this is a wise course for selected hazardous wastes that are so mobile, persistent, and toxic as to be banned from land disposal.

Such determination will be made within the context of our regulatory impact analysis, and the degree-of-hazard analysis I mentioned earlier. EPA feels the flexibility and discretion of the Administrator in determining this matter are essential in order to avoid the potential environmental damage which could come from a regulatory quick fix.

Before this exclusion level is lowered, safe and available disposal technology must be in place, so the dreadful midnight dumping of the past is not repeated.

If you would refer to the second chart in our testimony, there we did discuss it.

Lowering the exclusion level to 100 kilograms per month on a blanket basis would entail regulation of 130,000 small businesses in addition to the 60,000 large generators which are already part of our regulatory universe.

The amendment would bring into the EPA/RCRA regulatory universe facilities such as gasoline service stations, auto repair garages, drycleaning plants, machinery manufacturers, and small-volume electroplaters—businesses that are not presently equipped to safely handle hazardous waste disposal.

The reduction of the exclusion level would add less than 1 percent to the amount of hazardous waste regulated. But the Agency's regulatory universe would immediately triple.

HAZARDOUS WASTE MIXED WITH SEWAGE

This amendment in section 4 of the bill would require EPA, within 2 years of enactment, to submit to Congress a report specifying whether hazardous wastes discharged to a sewer are being effectively controlled under other environmental laws, or whether such wastes should be regulated under RCRA.

We oppose this amendment. The requirement will unnecessarily duplicate and overlap work already being done within the Agency. Much of the information is already available in reports developed by my office and the Office of Water. In fact, we supplied the list of reports for you, Mr. Chairman.

Further, in accordance with the requirements of the Clean Water Act, We are promulgating categorical pretreatment standards for industries which account for a large percentage of the waste introduced into publicly owned sewer systems. We are reviewing sludge management practices to be sure that we have a comprehensive and balanced program.

We have also initiated a work plan to complete the regulation of sludge under section 405 of the Clean Water Act.

We have also proposed amendments which would strengthen our legal authority to control unauthorized discharges to public sewers and improve the legal framework for managing the pretreatment program.

The amendments to the Clean Water Act's pretreatment requirements recommended by the Administrator to the Congress on May 25, 1982, if enacted, would provide criminal penalties for violation of pretreatment requirements and other changes we consider necessary for the pretreatment program.

HAZARDOUS WASTE INJECTION; LIQUIDS IN LANDFILLS

The amendment in section 5 of the bill prohibits, 6 months after enactment, disposal of waste by injection through a class IV well into or above an underground source of drinking water.

Injections through a class IV well above an underground source of drinking water are prohibited until such practices are regulated by State programs or the Administrator.

We cannot support this amendment as written. The Agency has already expressed this position in a related regulatory area. To receive primacy under the Safe Drinking Water Act, a State program to regulate underground injection must ban injection through a class IV well into an underground source of drinking water.

All 25 applications for primacy reviewed by EPA to date would also ban all injections through class IV wells above an underground source of drinking water, some with case-by-case exemptions allowed.

The Agency believes that the amendment allows enough flexibility to permit class IV wells to exist in the very unusual circumstances where injected materials would receive enough treatment or attenuation prior to reaching an underground source of drinking water to protect public health and the environment.

The Agency may not, however, be able to promulgate regulations allowing these exemptions in 6 months for States not seeking primacy. We recommend that the bill be modified to change the effective date of the prohibition to 12 months from the date of enactment.

This amendment would also require the Agency, within 1 year of enactment, to promulgate final regulations which minimize the disposal in landfills of liquid hazardous waste and free liquids contained in waste.

EPA does not disagree with the concept embodied in this amendment. The Agency plans to take the steps required, regardless of passage of this amendment. Our timeframe, however, is to promulgate the regulations in 18 months. We therefore suggest that the time limit in the bill be changed accordingly.

This amendment also requires, at annual intervals after enactment, submission of an EPA report to Congress identifying which types of hazardous wastes should and should not be deemed suitable for land disposal.

The Agency has already begun work on identifying these wastes. We hope to propose a ban on landfilling of certain types of highly mobile, toxic, and persistent wastes within the reporting period of the amendment.

In our rulemaking, we will detail our methodology on selecting specific substances. This rationale will constitute a report not only to Congress but also to the public.

The proposal for submission of an annual report is superfluous, and would constitute an unnecessary burden on Agency resources.

BURNING AND BLENDING OF HAZARDOUS WASTES

This amendment requires EPA, within 2 years of enactment, to promulgate regulations governing blending of hazardous waste to produce fuel and burning of hazardous waste or blended fuel for energy recovery.

The concept of this amendment is not new. The Agency is already undertaking the activities required. Sales of fuels blended with hazardous waste to commercial and domestic users is currently not regulated under RCRA.

Again I would ask you to refer to the handout where we have additional information in numbers.

EPA is currently studying the nature and extent of problems created by the blending, transport, handling, and burning of hazardous waste or hazardous waste blends, and what solutions might be required.

Additionally, EPA expects to require the blenders and large boilers to notify the Agency about their current practices. The concept of exempting from the notification requirements the small boilers, such as those found in residential dwellings, is obviously sound. Based on this information, we will make a determination as to whether or not regulations are necessary or appropriate to protect human health and the environment.

The amendment also uses the term "substances" where it is clearly intended to mean "hazardous waste." The broader authority provided by use of the term "substance" is unnecessary to achieve the objectives of the amendment. It could create confusion over our responsibilities under RCRA and compound the difficulty of writing sound regulations. We strongly recommend that the Congress modify this amendment to use the term "hazardous waste" rather than "substance."

SECTION 3005 PERMITS

The first part of this amendment in section 7 requires that permits issued to treatment, storage, and disposal facilities address any release of hazardous waste occurring prior to the date of issuance of the permit.

This amendment as proposed is too restrictive. The Agency opposes its inclusion. We recommend that Congress add more flexibility to the provision by changing page 11, line 15 of H.R. 6307 to read: "may, in addition"—rather than "shall, in addition," and by providing legislative history allowing this flexibility.

This amendment would affirm our authority to regulate, at the time of permitting, hazardous waste leachate plumes originating under land disposal facilities prior to permitting. We intend to exercise this authority in our forthcoming regulations for permitting of land disposal facilities. We expect, however, to require the permittee to control that portion of the leachate plume arriving at a point directly underneath the waste boundary.

Part (b) of this section requires any owner or operator of a hazardous waste management facility operating in interim status—other than facilities which store or treat in containers or tanks—to obtain a permit prior to the construction of expansions greater than 10 percent.

The provision allows the capacity of containers or tanks to be increased more than 10 percent without obtaining a permit.

Our opposition extends to this section of the amendment as well. We strongly recommend that Congress modify it to allow more flexibility. For example, it should allow expansion greater than 10 percent for any type of facility where expansion is required to meet Federal, State, or local requirements, for example, for treatment prior to land disposal.

TIMETABLE FOR REVIEW OF EPA PERMIT APPLICATIONS

The amendment in section 8 requires the Administrator to issue a final permit—or final denial—for applications for land disposal facilities within 4 years of enactment, and for other applications within 6 years. These time periods do not apply in authorized States.

We would strongly oppose this amendment. We agree with the goal of expeditious issuance of all RCRA permits and are working diligently at issuing permits, and improving and streamlining the issuance process.

Only this morning, I announced a public meeting July 22 at EPA to discuss the hazardous waste permit program. The purpose of the meeting is to obtain public comment and suggestions on methods to simplify, expedite, and reduce the costs of preparing and processing environmentally sound permit applications.

Also at the meeting, we will discuss the formation of a task force—subject to Federal Advisory Committee Act constraints—to carry out further work in this area. I am hopeful that these efforts will result in the development and implementation of an accelerated permit program that will provide for full protection of public health and the environment.

We believe attempting to estimate a reasonable timeframe for permit issuance is premature. We do not yet have enough experience to estimate realistically how much time and resources will be required for issuance.

We would propose reporting back to Congress in 2 years on these factors, followed by development of a realistic timetable for issuing permits.

Furthermore, the amendment would have little practical constructive effect on the program. The large majority of States is expected to be authorized by early 1985. The amendment would exempt permits in these States from the deadlines.

EPA recommends an amendment to provide the Agency authority to identify classes of facilities and to establish through formal rulemaking a specific set of standards and permit conditions for those facilities.

Upon promulgation of those standards, facilities within the class would not be required to complete detailed permit applications. Rather, each applicant would need only to submit a minimum amount of information about the facility and certify that he will comply with the class permit conditions. The class permit concept recognizes that certain classes of facilities share common features and practices.

Further, the permit conditions necessary to assure adequate protection of public health and the environment are not affected by the location of the facility or other site-specific features. As a result, permits issued to these facilities under the existing regulations would be essentially identical.

EPA does not intend to use the class permit process for issuing permits to land disposal facilities, incinerators or other facilities where site-specific concerns exist. Rather, EPA will apply the class permit process to those facilities having lower environmental and public health concerns. In particular, the Agency will target its efforts toward developing and issuing class permits to the large number of facilities which store hazardous waste in tanks and containers for which non-site-specific standards can be established.

GROUND WATER COMMISSION

The amendment in section 9 of the bill would establish a 13-member Commission with a $10 million authorization to undertake a list of 10 duties by 1986. Its reponsibilities would include assessing the effect of contamination from solid and hazardous waste on the supply of ground water, and assessing and comparing Federal authority and mechanisms with those of the States in protecting ground water.

We oppose this amendment. The Agency already has collected much of the information which would be required of the Commission. The Agency is already taking steps to coordinate Federal ground water regulation and to help States enhance their ground water programs. The long leadtime to produce this report would actually slow Federal and State efforts to enhance ground water policy.

PRESERVATION OF OTHER RIGHTS

The section 10 amendment would replace the word "section" in the first line of section 7002(f) with the word "Act". The practical effect is apparently to insure that persons may seek relief under Federal common law nuisance, where applicable, for all types of activities regulated under RCRA.

We oppose this amendment. Actions under State common law nuisance are available without this amendment. We believe that Federal common law nuisance may be applicable to facilities that are not yet permitted under RCRA. Once permitted, however, we believe that the RCRA and applicable permit requirements are sufficient. We should not subject permittees to the unpredictable demands of Federal nuisance law in addition to the carefully considered requirements of RCRA permits.

BENEFICIAL USE OF HAZARDOUS WASTE

Section 11 requires regulations to insure that the beneficial use, reuse, recycling, or reclamation of hazardous wastes is conducted so as to protect human health and the environment.

The concept of this amendment is consistent with our goals. It affirms our authority to define "solid waste" to include wastes which are being used, recycled, recovered, or reused. We plan soon to propose such a definition for comment. This amendment would render moot pending litigation challenging our authority to regulate beneficial use, reuse, recycling, or reclamation of hazardous wastes. However, the amendmemt could be interpreted to require regulations whether necessary or not to protect human health and the environment. The need for regulations should be clarified.

As we commented earlier, this amendment uses the term "substance" where "hazardous waste" is intended. We again strongly recommend that Congress modify the amendment to include the term "hazardous waste." Without this clarification, we may be required to regulate substances that are not legitimately within the purview of this program.

Let me now focus on the additional amendment that has been proposed to be included in H.R. 6307.

INSPECTION PROGRAM

We understand that an amendment is proposed that would establish a 20-member Inspection Board empowered to propose to the Administrator minimum standards for the conduct and frequency of all inspections of hazardous waste facilities.

The goal of periodic frequent inspections of all hazardous waste facilities by competent and trained inspectors is highly desirable. However, there is currently a high level of inspection activity by trained Federal and State regulatory officials. By the end of fiscal year 1982, we project Federal and State inspections under RCRA to total nearly 9,000. This is a substantial increase over fiscal year 1981.

Additionally, insurance carriers conduct inspections for their own purposes. It would be premature to establish a new regulatory body [the Inspection Board] to oversee the entire effort. An approach such as that proposed appears neither necessary nor cost effective. While it may be worthwhile to explore further the use of private inspections to supplement Government resources in carefully designed circumstances, enactment of this amendment is not recommended at this time.

In conclusion, Mr. Chairman, let me reiterate the point I made in the beginning. We are moving as rapidly as possible to implement reasonable, effective operating rules in the areas which H.R. 6307 addresses. While we appreciate the congressional intent of these amendments, we believe the primary effect of changing the statute at this time will simply be to complicate and perhaps disrupt the smooth implementation program into which we are rapidly settling.

That concludes my formal testimony. I would like to thank you, Mr. Chairman, and members of the subcommittee for the opportunity to meet with you once again, especially on a matter as important as RCRA reauthorization. The agency appreciates every opportunity to share its views with Congress. Working together, we can refine these laws so that the executive and legislative processes can proceed in harmony. This is the spirit in which my testimony is given.

Senator CHAFEE. Thank you very much, Ms. Lavelle. I think we can put you down as unenthusiastic for the House measure.

[The charts referred to by Ms. Lavelle follow:]

EPA POSITION
ON RCRA AMENDMENTS

		SUPPORT	MODIFY	OPPOSE
3.	SMALL QUANTITY GENERATORS			X
4.	WASTE IN SEWAGE			X
5.	WASTE INJECTION		X	
5.	LIQUIDS IN LANDFILLS		X	
5.	BAN FROM LANDFILLS		X	
6.	BURNING AND BLENDING		X	
7.	PRIOR RELEASES			X
7.	EXPANSION			X
8.	PERMIT TIMETABLE			X
9.	GROUNDWATER COMMISSION			X
10.	FEDERAL COMMON LAW			X
11.	BENEFICIAL USE		X	
	PRIVATE INSPECTION			X
	PERMIT BY CLASS	X		

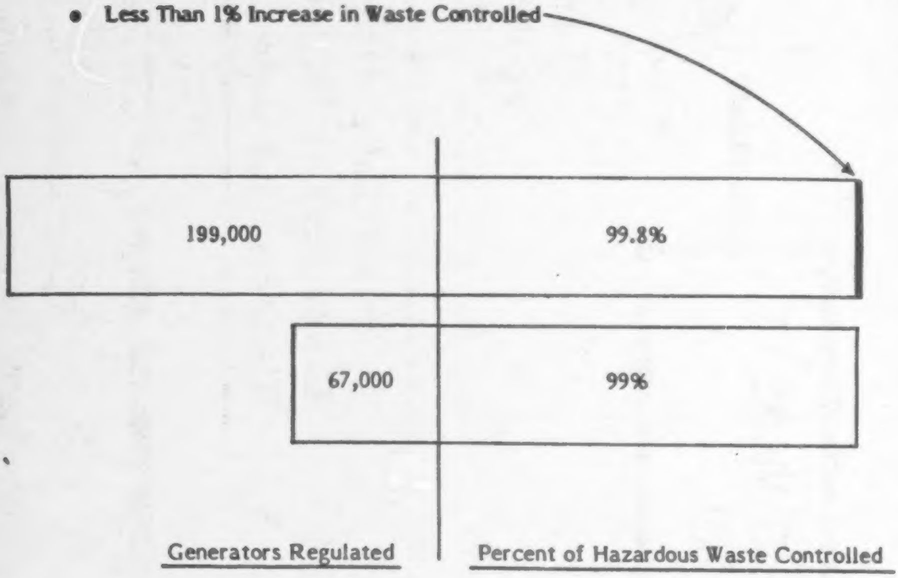
COVERAGE OF 100kg/mo--1000kg/mo GENERATORS

- **Triples Number of Generators Regulated**

6000	Publishers & Printers	2000	Local Transit Companies
2000	Hospitals	6000	Metal Fabricators
72,000	Auto Service/Repair Shops	14,000	Misc. Repair Shops
14,000	Machinery Manufacturers	3000	Furniture Builders
6000	Dry Cleaners	7000	Assorted Other

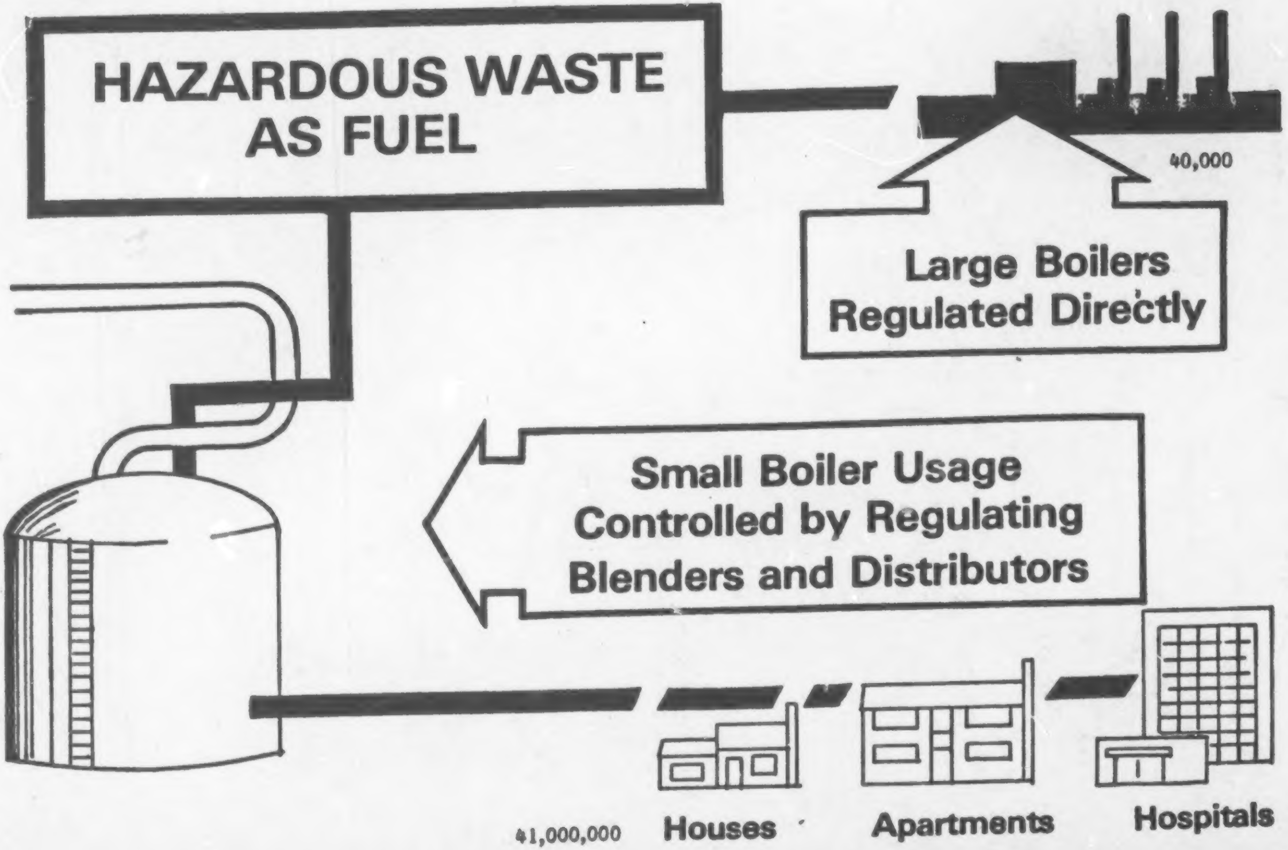
TOTAL = 132,000 additional

- **Less Than 1% Increase in Waste Controlled**



Sec. 6

Burning and Blending



HAZARDOUS WASTE AS FUEL

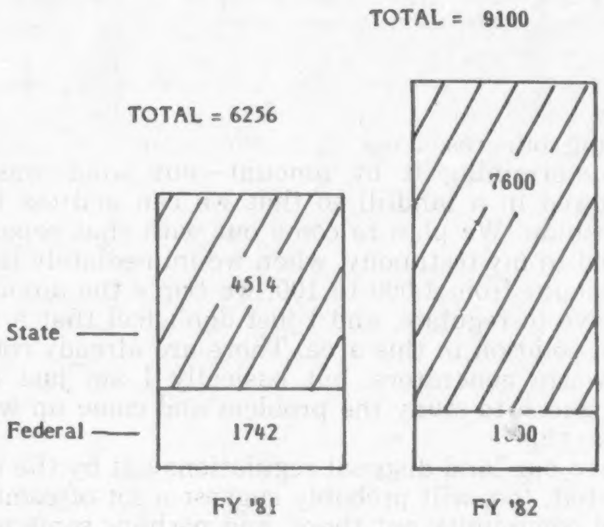
40,000

Large Boilers
Regulated Directly

Small Boiler Usage
Controlled by Regulating
Blenders and Distributors

41,000,000 Houses Apartments Hospitals

FACILITY INSPECTIONS UNDER RCRA



CLASS PERMITS

STREAMLINED PROCESS

- Fewer Steps
- Less Time
- Less Costly

I am not that familiar with the House bill, but I must say I share your concern about having groundwater commissions and 20-member boards set up. It seems to me we have got an agency and the correct way is to have the personnel from the agency conduct inspections, for example, rather than have other organizations set up within them, and it seems to me the control of these agencies, these commissions or boards would get very fuzzy. Who do they report to?

Now I have a couple of questions in connection with small quantity generators.

One concern which we have is with ground water contamination from hazardous and solid waste disposals. In the 1,000 kilograms per month exclusion, there is concern, at least I have concern that further groundwater contamination might occur that would not happen if we had a lower exclusion.

What is your opinion on that?

Ms. LAVELLE. That might possibly be the case. I guess I have to plead that we need time to study this whole problem. At this point we are putting our resources into determining what waste—not necessarily determining it by amount—but what waste should never be allowed in a landfill so that we can address that in an immediate fashion. We plan to come out with that report quickly.

But as I said in my testimony, when we immediately take the exclusion by amount from 1,000 to 100, we triple the amount of generators we have to regulate, and I just don't feel that a regulatory fix is the best solution in this area. There are already contracts existing with waste generators, but basically I am just asking for more time, I guess, to study the problem and come up with a solution to address this.

We will have our land disposal regulations out by the end of this month, and that, too, will probably suggest a lot of comment from the regulated community out there, and perhaps some of these solutions will be forthcoming.

Senator CHAFEE. Let's talk a bit about the timetable for reviewing permit applications, which you talked about.

This, as you mentioned, has been bogged down and has taken a very long time. How can we be assured that EPA will move forward as quickly as possible in reviewing applications for permits?

Ms. LAVELLE. As I testified before this committee before, it is not a problem where you can just throw money in and resources in and get a permit. The States are in the same problem area that we are; We don't know how to proceed to permit these facilities. We need to develop a protocol, sample permits, training for people to conduct the permit instructions, and also for those generators to submit permits. That is why I think this task force would give us the management tools that are required at this point. From then on it is just proper utilization and management of the resources we have in the Agency to expeditiously move to permit these facilities.

The class permit concept which I tried to introduce is key to our success also, because we could then focus our resources on the more technically intensive resources, land disposal, new technologies, et cetera, so that we can bring those along in a permit for them—we have promulgated guidance which sets targets. We have worked with the States to set hard targets, and we will continue to work with the States so that these targets will be met.

But it is not as easy as one would think when you look at it immediately.

Senator **CHAFEE**. You just mentioned land disposal regulations. You said they are coming forward with them. When do you think they will be ready?

Ms. **LAVELLE**. We are hoping June 30.

Senator Chafee. What about the waste oil study? Where does that stand?

Ms. **LAVELLE**. Do you want to talk about that?

Mr. **COOK**. We are currently undertaking a number of studies to prepare for regulation of waste oil, including test burns of waste oil in boilers, studies of what happens to it when it is put onto roads for road oiling purposes, and studies of what is actually in waste oil out in the real world to try to find out how bad it is and what potential damages it might cause.

We hope to have the results of those studies available and be able to propose regulation in 1983 and then go final in 1984 if we find that practices throughout are serious enough to cause concern for public health and the environment.

Ms. **LAVELLE**. Our investigation will be completed by next spring.

Senator **CHAFEE**. Next spring, you say?

Ms. **LAVELLE**. Yes, Senator.

Senator **CHAFEE**. Has the Agency signed an agreement in the settlement of the NRDC suit which allows 50 percent expansion of interim status facilities?

Ms. **LAVELLE**. Yes, Mr. Chairman, we have.

However, we have reassessed our position on this expansion from 50 percent expansion, and we have been involved in discussions with the parties to the agreement. We have suggested a more restrictive allowance, and it is the 10-percent expansion figure we came up with. We expect to promulgate our position on this in the very near future, but as I said to the parties in the agreement, the whole environment has changed. We now have our regulations promulgated, land disposal, that will be out right away, so we know how it can go ahead obtaining a permit. So it is not the same type of environment it was a year or a year and a half ago, when the initial negotiations were taking place.

Senator **CHAFEE**. Well, we have got some more questions that you might answer in writing, Ms. Lavelle.

We have quite a group of witnesses and we want to move ahead, so if you could answer these questions we submit, I would appreciate it.

Ms. **LAVELLE**. I would be happy to do that, Mr. Chairman.

Senator **CHAFEE**. And other Senators might have questions, so if you could answer those as well.

Ms. **LAVELLE**. Of course.

Senator **CHAFEE**. Thank you very much.

We will be staying in touch with you as we move forward on this.

Ms. **LAVELLE**. Very good.

Senator **CHAFEE**. Mr. Ben Bialek and Mr. Robert Abrams. I understand that Mary Lyndon is here representing Mr. Robert Abrams.

Mr. Bialek, you may begin.

Do you have someone with you?

Mr. **Bialek**. Yes, Mike Scibinico, assistant attorney general assigned to the Maryland Environmental Service.

Senator **Chafee**. Please proceed.

STATEMENT OF BEN BIALEK, OFFICE OF GOVERNOR HUGHES, STATE OF MARYLAND, ACCOMPANIED BY MICHAEL SCIBINICO, ASSISTANT ATTORNEY GENERAL, MARYLAND ENVIRONMENTAL SERVICES

Mr. **Bialek**. I am Ben Bialek. I presently serve as assistant legislative officer to Harry Hughes, Governor of the State of Maryland. Accompanying me today is Michael J. Scibinico II, a State assistant attorney general assigned to the Maryland Environmental Service.

The Governor thanks you for the opportunity to testify at this hearing and regrets that because of a previous commitment, he is unable to personally appear before you today.

Senator **Chafee**. Mr. Bialek, I think you will have to cut down your testimony to some degree.

Mr. **Bialek**. I will summarize it for you.

Senator **Chafee**. Very well, proceed.

Mr. **Bialek**. I am here on behalf of the Governor who is committed to solving the hazardous waste disposal problems. Quite frankly, I am here to ask the Senate not to act on the expansion of interim status sites and in the same manner as that recommended by the House Energy and Commerce Committee in H.R. 6307 which is the companion RCRA reauthorization bill.

The House committee approach which requires—in section 7(b) of the House bill, the Committee on Energy and Commerce proposal would limit expansion during interim status to 10 percent or less of the facility's stated capacity in its original interim status application. Any expansion in excess of 10 percent of capacity must receive a final RCRA permit prior to constructing the desired capacity.

This could seriously impede management and create serious economic problems. Today Maryland faces an almost complete exhaustion of hazardous waste landfill disposal capacity. In 1980, which is the last date—most recent year where we have records, 427,000 tons of hazardous waste was generated in the State. Off-site disposal requirements were for 300,000 tons; 350 Maryland industrial firms generated waste in 1980. Last May the one general landfill hazardous waste landfill in Maryland was closed by court order after a trial court determined that nonconforming land use status had expired and the county zoning ordinance was constitutionally valid.

The only other hazardous land waste fill in Maryland of any significance is one which is operated at Hawkins Point currently by the Maryland Environmental Service which is a State-public corporation, which has authority in the area of waste management. That facility currently receives chrome or waste from Allied Chemical Corp. as well as the Maryland Port Administration which is another State agency.

That facility is expected to close because of a depletion of capacity by this summer.

We recognized back in the fall of 1981 that we were in for a serious disposal capacity crunch. Governor Hughes in 1980 introduced legislation establishing a Hazardous Siting Board to have the ability to overcome local zoning if it determined that there was a public need for disposal capacity and that the site was suitable. The Hazardous Siting Board, in furtherance of its mandate, commissioned a study to determine what Maryland's hazardous waste needs were. That report, which I might add after public hearings was adopted by the siting board and promulgated as regulations, found that the States annual hazardous waste landfill need was 200,000 tons per year.

It determined that only 14,000 tons of the waste generated in Maryland was incinerable. It also determined that that waste was susceptible to acqueous treatment, was in fact being treated and that acqueous treatment facilities were adequate.

In light of that finding and with our knowledge that the landfill I mentioned before was just recently closed and our knowledge that landfill capacity was being depleted at the existing State facility, the Governor asked the Maryland Environmental Service to make a proposal to assure that there would be continuity of disposal of landfill disposal in Maryland. He asked the Maryland Environmental Service to initiate a site study.

The Maryland Environmental Service investigated all the regions of the State, came up with 14 candidate sites. It concluded, looking at a wide variety of factors including regulatory restraints at the Federal and State level, that to assure the continuity of land disposal, the most acceptable thing to do was to expand the existing State landfill to provide a disposal capacity both for Allied Chemical, the Maryland Port Administration and other hazardous waste generators in the State of Maryland.

Now the MES facility prepared detailed engineering feasibility studies determining that site expansion study was feasible from that standpoint.

In addition, the State Board of Public Works, which is the highest administrative body in the State of Maryland, consisting of the Governor the comptroller, and treasurer, loaned the agency $2.5 million to initiate the necessary planning which was required to go through the existing State regulatory process and Federal regulatory process.

The facility was planned with the existing EPA regulation governing expansion of interim sites in mind. That regulation, which is found at 4 CFR section 122 or 123, I think, allows the facility to expand. No. 1, if there is a demonstration of need, and, No. 2, if the capital costs which would be incurred by the facility do not exceed 50 percent of the capital cost of a comparable hazardous waste management facility. It is not a capacity issue at all. The current State facility is a very small facility, and the 10 percent limitation would allow it maybe 1 or 2 months worth of capacity.

It has no relation to the significance of the expansion in terms of satisfying hazardous waste disposal needs.

The current State application for EPA approval would allow only 1½ years worth of disposal capacity. All the information requested by EPA has been submitted and we are hopeful there will be an expeditious and a favorable outcome.

What we see—the reason we are here, however, is that because of the uncertainty of the timing of the passage of the authorization bills and obviously what is going to be in there, we are afraid there will be a substantial changing of the ground rules which would adversely impact the State of Maryland, require termination of the process and leave the State without any disposal capacity whatsoever.

We fear this would result in threatened plant shutdowns. In fact our office has already received in writing from Allied Chemical a statement indicating that if the Hawkins Point facility could not be expanded, the site, or the plant would—their Baltimore plant that is—would probably be faced with a permanent shutdown.

Three hundred employees are employed there, payroll is I believe $11 million—I could go on and on with the economic results.

But we are also afraid that small medium size generators are going to have tremendous burdens placed on them because of the increased transportation costs in sending their wastes to other States. We are afraid that what will result is an increase in midnight dumping. Where people will be storing wastes on site because of lack of disposal capacities and are not prepared to handle it, it increases the potential for something unfortunate to happen. We are sensitive in Maryland to the fact that two Superfund sites have been identified in our State and are in the process of being cleaned up, and we believe that there are substantial environmental risks associated with not having strong facilities within the State's boundaries.

I might add——

Senator CHAFEE. Have you got the whole approval for any expansion you require?

Mr. BIALEK. We have informal concurrence of the mayor and the city council. We have no formal one. We would not have proceeded——

Senator CHAFEE. Well, do you have to get approval?

Mr. BIALEK. We will get their approval.

Senator CHAFEE. That was not the question. Do you have to get——

Mr. BIALEK. I would say yes.

Senator CHAFEE. In order to expand a present site on State land?

Mr. BIALEK. Well, the Maryland Environmental Service——

Senator CHAFEE. Never mind, if you say you have to.

We might change the ground rules here, that is what you are worried about, to effect the expansion you have put all this time and effort to date.

Mr. BIALEK. That is right, sir.

Senator CHAFEE. All right, anything else?

Mr. BIALEK. We just said if the Senate did decide to take an approach similar to what has been proposed in the House bill, we would respectfully request, one, that facilities have in good faith applied under the existing regulations not be affected by the 10 percent rule, or—and this could also be done in conjunction with that approach, we would request EPA be given the flexibility to waive the 10 percent requirement——

Senator **Chafee**. Is that the only part of the House bill that effects you, the extension of the interim facility by 10 percent?

Mr. **Bialek**. That is the one that affects us most. As I said in my prepared testimony, we asked the State department of health and mental hygiene to submit comments by July 9 to address the small quantity generator issue and also the waste oil issue.

Maryland has a very comprehensive oil recycling act, and we are afraid the regulations or the law changes in the House bill might discourage the recycling of used oil in accordance with our programs.

Senator **Chafee**. That would not affect this site?

Mr. **Bialek**. No, that is unrelated.

Senator **Chafee**. Well, I can see the problems you have, and particularly as you point out, this Hawkins Point site is the only hazardous plant in your State.

Mr. **Bialek**. That is right.

Senator **Chafee**. If they didn't go there where would they go?

Mr. **Bialek**. They would be forced to go—there is some landfills I understand in Pennsylvania, but it is not clear whether those landfills would be permitted necessarily to take the waste which the particular generator has. There is also a facility in New York and one in Alabama.

Senator **Chafee**. That one in Alabama, everybody knows about that, that must be a big one.

Mr. **Bialek**. We have tried responsibly to deal with this problem as a State problem.

Senator **Chafee**. I think that is right, I commend you for that. I wish other States would move ahead to seek a State solution. We all know the problem, everybody is for it, but not from them.

Let's hear from Miss Lyndon.

STATEMENT OF MARY LYNDON, ASSISTANT ATTORNEY GENERAL FOR THE STATE OF NEW YORK, NATIONAL ASSOCIATION OF ATTORNEYS GENERAL

Miss **Lyndon**. I am Mary Lyndon, I am assistant attorney general for the State of New York. I am here representing the National Association of Attorneys General and Robert Abrams, attorney general of the State of New York.

We urge the Senate to enact an amendment to RCRA like section 10 of House Bill 6307, which clarifies RCRA's savings clause. This clarification is needed to prevent further unnecessary litigation over what Congress intends by the savings clause.

Part of the purpose of the savings clause is to continue in effect all existing State enforcement tools for the pursuit of RCRA's environmental goals.

NAAG recommends that RCRA's savings clause be clarified with slightly different language from the House bill's version. We offer our assistance to the subcommittee to prepare an appropriate RCRA savings clause. In addition, we will file a more thorough written statement for the record.

RCRA sets minimum standards for the handling of solid waste and hazardous waste, but the standards are written into a dynamic context of Federal, State and local laws. These laws include local zoning and sanitation ordinances, State health, environmental, commercial and labor codes, State common law and equity, and Federal statutory and common law. Congress intended RCRA not to supplant these, but to supplement them.

RCRA establishes a working partnership between the national and State governments. It specifically encourages states to make their own decisions on how to regulate wastes. The states continue to hear the great part of responsibility for implementing and enforcing all laws relating to wastes.

The common law, particularly the public nuisance action, is essential in certain situations—when flexibility, speed or an individualized approach is called for. The State's common law enforcement options should be clearly safeguarded by RCRA's savings clause.

Clarification of the savings clause is necessary, because the Supreme Court's 1981 decision in *City of Milwaukee* v. *Illinois,* has been widely misinterpreted.

In litigation some defendants have argued that city of Milwaukee holds that State common law of nuisance has been preempted and that all Federal common law of nuisance has been abolished by Congress. Neither of these conclusions result from the decision, as the EPA witness indicated.

In *City of Milwaukee,* the Court held that Federal courts shall not apply Federal common law of interstate nuisance where: One, a Federal statutory scheme provides for completely comprehensive controls on pollution; two, a Federal permit has addressed the problem sought to be remedied; and three, the Federal statute provides administrative processes for resolving interstate disputes.

Unlike the Clean Water Act, RCRA does not have interstate provisions and it leaves numerous gaps in its regulatory scheme. The city of Milwaukee holding will therefore not apply do nost RCRA-related cases.

However, there is dicta in the case which, taken out of context, has been used to argue that savings clause language similar to RCRA's preempts State statutory and common law and the Federal common Law, even where the statute is not comprehensive. There have not been many court decisions yet on this point. However, the issue is being raised and litigated.

The Supreme Court's opinion relied heavily on its interpretation of congressional intent in the Clean Water Act's savings clause. NAAG believes that Congress does not intend for RCRA to preempt State common law or to prevent States from ever seeking remedies for interstate pollution in the Federal courts. It should make this clear by amending RCRA's saving clause.

There are compelling practical reasons why preserving common law is important. It is a basic rule of equity that courts will not issue an injunction where there is a remedy at law, but a legal remedy is not always available. There will always be situations which cannot be foreseen when a statute or regulation is written.

In the usual attorney general's nuisance case, an individual polluter is negligently causing a local public health problem and the statutory on regulatory scheme does not provide controls. The most notable RCRA gaps are the "small generation" and "boiler exemptions" in EPA's rules. These exempt large numbers of hazardous wastes handlers form Federal regulations.

Even when an agency is fully implementing a statute, it must set priorities. It will delay addressing problems which do not seriously affect the majority of citizens, even though they may very critically damage certain localities. EPA has estimated that it will take it 12 years to issue RCRA permits. In the meantime, its RCRA regulations have no substantive effect on nonpermitted handlers of wastes.

Another kind of case develops where permits for an activity are granted, but through the discharger's negligence and inadequacies in the agency's prior review, a public health problem develops. For example, it is the law of Illinois that a public nuisance may be found to exist and an abatement order issued by a court, even though permits have been granted.

Nuisance law is a basic way in which States exercise the police power and function as parens partiae to preserve the public health and welfare.

Indeed the State's common law enforcement powers are so basic to their governmental function that a move to preempt them would test the limits of the 10th amendment restrictions on Federal authority.

The *City of Milwaukee* decision recognizes that Congress did not intend to preempt this State law.

Congress has preserved almost all stricter State law related to environmental quality. It preempts State law and Federal law only where it is necessary to avoid conflicts between State and Federal law. There is no conflict between RCRA and the States' use of common law.

There are occasional situations in which pollution travels between States and is not controlled pursuant to a Federal statutory scheme. After the *City of Milwaukee* decision, where there is a statutory provision for resolving interstate disputes, this will supplant Federal interstate nuisance law. However, where there are no statutory interstate provisions, as in the RCRA context, *City of Milwaukee* preserves this function of Federal common law.

I would like to respond to EPA's statement here. They state that the Federal common law would cover a discharge until there is a permit issued under RCRA: after that no Federal common law would apply.

This statement oversimplifies the situation. A number of the common law nuisance cases in the 1960's and 1970's came about in interstate situations. RCRA has no provision for resolving disputes between States. If there is no Federal common law of nuisance, States will not have an adequate forum to seek a remedy for infestable pollution.

I will address this problem further in my written statement.

In conclusion, NAAG requests you to prevent added difficulties for the State in their efforts to control hazardous wastes. We urge you to amend RCRA's savings clause to make sure we keep all our existing legal tools available.

Senator **Chafee**. I must say I have a little trouble with your position. Somebody applies and gets a permit in good faith, and then is hit under the common law for the nuisance suit.

I just don't know how anybody proceeds under those conditions.

How can you have any confidence in anything anybody does if they make a substantial investment, have complied with the permit in every respect, and yet have them absolve themselves of potential liabilities.

Ms. **Lyndon**. There are two parts to the question.

One part of the answer is that there are lots of things that can come up that would change the expectations of any company that is discharging.

Changes in the standard can occur when the permit expires, or standards can be applied under other applicable laws. So that permits are not intended to and cannot give absolute certainty.

But in addition to that, there is a lot of misunderstanding about what the common law of nuisance does. It is the law of most of the States that nuisance is an effect from negligence and it will not be found where there is no negligent activity producing the nuisance. State law of nuisance provides a common law right to a remedy for an injury caused by negligence. This is part of the basic law of the States and incorporated in most of the States' constitutions.

So in order to say a permit can prevent a common law claim for nuisance, we would have to say a permit authorizes negligence, and that would be something that would be preempting quite a bit of State law.

Senator **Chafee**. Well, we have not heard the end of this, and it has come up with other statutes. I think your position eloquently spoken, gives us a lot of problems here.

But we will spend more time on that.

Ms. **Lyndon**. I would be very happy to work with the staff to answer any questions they have, and I will be submitting a more complete statement both on this topic and on some of the other points in the House bill.

Senator **Chafee**. Fine, thank you.

Let's have the next panel, Mr. Wilson and Mr. Kimble. Mr. Wilson, why don't you go ahead.

STATEMENTS OF DONALD K. WILSON, VICE PRESIDENT, HARTFORD STEAM BOILER INSPECTION & INSURANCE CO.; AND JAMES L. KIMBLE, COUNSEL, AMERICAN INSURANCE ASSOCIATION

Mr. **Kimble**. Mr. Chairman, I would prefer to begin.

I am Jim Kimble, senior chairman with the American Insurance Co. To my left is Don Wilson and Jan Edelstein.

The association is comprised of 168 insurance companies, the Hartford Steam Boiler is a member of the American Insurance Association.

Our principal focus today is on the issue of the need for mandatory safety inspections at waste facilities. The member companies of the AIA are currently providing accidental coverage required by the Resource Conservation and Recovery Act and as the coverage is phased in, the association members will provide the gradual coverage as well.

At this point I would like to turn to Mr. Wilson and allow him to elaborate on the issue of mandatory safety inspections.

Mr. **Wilson**. Thank you very much, Senator, for your time here, and I will be very brief, I understand the late hour and the number of witnesses that you have yet to hear on some very important issues.

We are here for only one reason, and that is that I think we have a proposal that will do a great deal to help in terms of improving the confidence of the public in hazardous waste sites.

Senator **Chafee**. Excuse me, Mr. Wilson, I know there is a live quorum on and I had better go vote, so let's just suspend matters here—we will check on that, Mr. Wilson, why don't you proceed.

Mr. **Wilson**. Thank you, just to back up for a moment, we think that we have a solution to a severe social problem that can bring together the private sector and public sector in the general public interest, and that is the proposal to use the private sector in inspection and to do it by modeling it after a program that presently exists in the boiler inspection laws that now are on the statutes of a number of States, and that system works by having a mandated inspection, by having certification for inspectors, and by having standards against which you inspect. That system has been going on for decades and has worked very, very well and very smoothly without any problems.

In those boiler laws we make inspections, we find the problems, we find things that are against the State regulations and we report those back to the States and we have had no problems with customers, with the States, the system has worked very, very well.

What I think that system would do in hazardous waste areas is to improve public confidence and put more emphasis on safety or loss control. I think we have spent too much time on the remedies and how much we will pay someone if they are injured, and not enough time on loss control and loss prevention.

If you will look at the inspections—and that is testified to a little while ago that 85 percent of inspections were made by the States, we have done an analysis of the inspectors in the States, the time they have spent and their qualifications, and quite frankly the qualifications vary all over the place. We have people with high school graduates, we have associates' degrees, we have Ph. D.'s in the scientific area, people in unscientific areas, standards against which they are inspecting, and it is not consistent. We think it would be in the best interest of the operators to have a constant set of standards against which inspections were made.

We believe by forming a consensus board to establish certification of inspectors and the standards against which they inspect, would be a great step toward compliance, by that I mean that if you are a party to making up the rules, you want to obey them, you get some ownership in the process, and if the consensus board is made up of the various entities, the environmentalists and insurance companies, et cetera, you would get a consensus of standards and those standards would have to be complied with.

So in summation, Senator, I would say that we think that there is already existing a model that could help in terms of providing manpower, and I certainly don't need to tell the Senator that the Federal Government as well as the States have budgetary problems, and I don't think there are enough inspectors on either payroll to do the job.

So we are proposing that there be a consensus board established, that that board be within EPA and not preclude any activities of the EPA, that that board set standards for inspectors and standards for inspections, that these inspections be mandated.

We think that is a super opportunity to marry the public and private sector.

Thank you very much, Senator.

Senator **Chafee**. Let me see if I understand your suggestion. Private companies would train these inspectors, they would be certified by a National Hazardous Waste Inspection Board, and then by remaining on the payroll of the private company, would go around and conduct the inspection of the hazardous waste sites?

Mr. **Wilson**. Yes, sir.

Senator **Chafee**. Now, first of all this would be on the national level, whereas it currently is not on the national level?

Mr. **Wilson**. The minimum standards would be set on a national level and adopted by the States as a minimum level.

Senator **Chafee**. So the advantages would be a uniformity of criteria for the inspectors?

Mr. **Wilson**. Yes.

Senator **Chafee**. And these inspectors would be hired by private industry?

Mr. **Wilson**. Yes, sir.

Senator **Chafee**. And then presumably the site being inspected would pay their fees, that is the way it is now for boilers presumably?

Mr. **Wilson**. That is right, yes, sir.

Senator **Chafee**. Well, it seems to me the two things are separate. One is to have a national board setting standards which could well be the standards for public employees in the States that are involved in this activity.

And the other step is the other part that has nothing to do with the first, which is to have private industry conduct inspection.

Mr. **Wilson**. That is correct, you could separate them. The issue is one of manpower, and the marrying of the private and public sector.

Senator **Chafee**. Your view is having them on the payroll of a private company, this expertise would then become mobile and could move among the States?

Mr. **Wilson**. Yes, it could move between the States, and in the case of insurance companies being one of the third parties allowed to make the inspection, they have dollars at risk if they happen to be the insurer of that site.

Senator **Chafee**. But presumably the inspector would only inspect the sites where his company is the insurer. I am not sure you would want it any other way; would you?

Mr. **Wilson**. No, sir, and we are suggesting you use other third parties, independent consultants also certified to do sites, if you just wanted to hire an outside inspector.

Mr. **Kimble**. Senator, if I could interrupt briefly, it is essential that the insurers be permitted but not required to do the safety inspections. It would be awkward if the insurer at risk, that is the insurer providing the liability coverage is forced also to be the safety inspector. There are a number of insurance companies which don't have the capability of doing safety inspections, but which do want to provide the liability coverage.

Senator **Chafee**. OK, fine, thank you, that is an interesting idea—I am not projecting this—I think there is a lot of merit to it. I think one of the problems we are going to encounter is that this is a very esoteric business in which skills are not widely held. If Maryland, for example, has only one site, and perhaps New England has only one or two regional sites I can see where the States or regions wouldn't have the expertise that is required.

Mr. **Wilson**. That is why we hoped our proposal would be helpful.

Senator **Chafee**. Thank you both very much.

The next panel, Miss Hindle, Dr. Johnson, Mr. Rasheed—why don't we do this in order, so I will know who is who.

Let's start on the left with Miss Hindle, then Mr. Johnson, third chair, Mr. Rasheed, then followed by David Lennett, next Joel Hirschhorn, Mr. Lindsey, Mr. Clark, and finally Mr. Moore.

Senator **Chafee**. Now, as I understand it, each person has been forwarned that his or her testimony will be 5 minutes or less; is that right?

Voice. Yes.

Senator **Chafee**. Miss Hindle, why don't you proceed.

STATEMENTS OF MARGUERITA C. HINDLE, KENYON INDUSTRIES, KENYON, R.I., AMERICAN TEXTILE MANUFACTURERS ASSOCIATION, ACCOMPANIED BY NICK ODUM; DR. CHARLES JOHNSON, TECHNICAL DIRECTOR, NATIONAL SOLID WASTE MANAGEMENT ASSOCIATION; VIC RASHEED, SERVICE STATION DEALERS OF AMERICA; DAVID J. LENNETT, ENVIRONMENTAL DEFENSE FUND; JOEL HIRSCHHORN, OFFICE OF TECHNOLOGY ASSESSMENT; ALAN M. LINDSEY, DIRECTOR, ENVIRONMENT, INTERNATIONAL PAPER CO., REPRESENTING THE AMERICAN PAPER INSTITUTE; WENDALL J. CLARK, AMERICAN PETROLEUM INSTITUTE; AND WILLIAM P. MOORE, ENVIRONMENTAL SPECIALIST, ROHM HAAS CO., CHEMICAL MANUFACTURERS ASSOCIATION

Miss **Hindle**. I am Marguerita C. Hindle, presently serving with the American Textile Manufacturers Institute.

I am also vice president of research and development for Kenyon Industries and responsible for corporate regulatory affairs.

Kenyon Piece Dyeworks and our Peacedale Processing Co. specializes in the dyeing, finishing, coating and laminating of synthetic and blend fabrics for industrial, apparel, recreational and military markets. We are the largest private employer in southern Rhode Island and employ approximately 650 people.

Since I speak today for the American Textile Manufacturers Institute, Inc. (ATMI), I also wish to say that ATMI is the national trade association representing spinners, weavers, knitters, tufters and finishers that collectively manufacture 85 percent of the textile production in the United States. The American textile industry, which employs approximately 1 million people, including 47 percent women and 18 percent minorities, represents a major industrial segment of the Nation's economy.

The textile industry, like so many other American industries, supports the current Resource Conservation and Recovery Act which created a comprehensive regulatory scheme governing all aspects of the hazardous waste cycle, from generation to disposal. We are supportive, Mr. Chairman, of S. 2432 passed by this committee on May 25, 1982. As reported, this measure reauthorizes the current law without making any substantive changes.

We believe it is far more beneficial to allow EPA to issue the final RCRA regulations as Congress mandated in 1976 than to amend the law midstream and create confusion and uncertainty at a most critical time in the regulatory process. Legislation amending RCRA reported by the House Energy and Commerce Committee (H.R. 6307) on May 11, 1982, would disrupt this process. It is for this reason, I am before your subcommittee today to address a number of the proposed changes and the impact it would have on the textile industry.

Senator CHAFEE. You have got quite a long statement here——

Miss HINDLE. I am going to whip through it as far as I can.

Senator CHAFEE. Very well.

In reviewing the proposed amendments, we have tried to address the question of whether or not they will insure better implementation of the RCRA goals and mandates. Our primary area of concern is the proposal to lowerthe small quantity exclusion from 1,000 kilograms per month to 100 kilograms per month. While textile wastes have not been listed by the Agency as hazardous per se, various solvents and finishing agents used by Kenyon and many other textile manufacturers meet EPA's ignitability standard and if generated in significant quantities must comply with subtitle C regulations.

Many small textile operations would be faced with the full impact of the subtitle C requirements by lowering the exclusion simply because they generate one-half drum of an ignitable liquid per month. We do not believe this type of operation poses a significant environmental threat to warrant such regulatory control.

It is important to keep in mind that the existing rules do not exclude small generators from all requirements. They are required to properly package, label and contain their wastes in accordance with the Department of Transportation hazardous materials standards. In addition, the waste must be sent to either a RCRA facility with interim status, or a facility permitted or licensed by the State. It is also important to remember that the existing rules already control smaller quantities from 1 to 100 kilograms per month of extremely hazardous waste.

We have reviewed State requirements and are satisfied that large amounts of hazardous waste do not go unregulated due to the small generator exclusion, many States including Rhode Island cut it off at 100 to 0 kilograms per month, and regulated other types of waste such as waste oil. In addition, several States such as North Carolina have adopted the Federal hazardous waste requirements. However, the State solid waste rules require that small quantities of hazardous waste must be treated prior to disposal in a subtitle D facility. We have attached for your information, a copy of our State survey demonstrating the control of small quantities of hazardous wastes.

Further, congressional concern that the permitting process is proceeding at much too slow a pace will be exacerbated by adding thousands of new small generators to the system. Problems are already occurring in States like South Caroline that have lowered the exclusion to 100 kilograms per month. One hundred kilograms is less than one-half of a 55 gallon drum. Waste generators are finding it increasingly difficult to get transporters to pickup such small quantities forcing them either to violate the 90-day storage rule or become licensed storers which subjects small generators to unreasonable costs for no apparent environmental need. This will also vastly increase the number of storers to be permitted.

Congressional amendments to the small quantity exclusion would also disrupt the pending rulemaking petition. EPA has received over 250 comments on NSWMA's petition on small quantity generators. We would hope that this committee, in its wisdom, would hold off action on this issue at least until the Agency completes its review and indicates its position. Changing the regulation midstream would divert EPA's limited resources and be counterproductive. The Agency has necessarily prioritized its activities to deal with the most serious environmental problems first.

Limiting EPA's discretion and restricting statuatory deadlines will place severe resource constraints on the Agency and have a direct impact on the operation of the entire regulatory program. This is at a time when the EPA computers have not been able to assign permanent generator notification numbers to all initial notifiers submitting EPA Form 8700-12 on August 18, 1980.

Our next area is the attempt to expand EPA's jurisdiction under RCRA to include materials before they become waste. We have spent much of the last 2 years dealing with the problems not adequately dealt with in the original regulations.

The congressional amendments under consideration will disrupt the Agency's ongoing activities and delay rather than hasten implementation of the act. For example, the definition of waste has been redrafted 37 times over the last year through the negotiations from the pending legislation.

The rewrite strikes a delicate balance between concern focused on recycle/reuse activities and eliminating the incentives for reuse and recovery through overregulation. Congress approach would discourage the beneficial use and recycling of materials through increased administrative burdens and costs.

One has only to look at the current RCRA part B application requirements to see the extent of these costs. It is estimated that the part B application will run 200 to 300 pages, and the requirements apply equally to treaters and storers as well as disposers. In addition, there is no mechanism for requesting a variance or waiver of any of the informational requirements. Given the costs to operate as a hazardous waste facility, generators will dispose of these materials rather than utilize them as a resource.

We currently recover 5,000 to 6,000 gallons per month of solvent from one fabric coasting range (oven). This solvent is returned to our supplier for use in the manufacturing of coating compounds which is shipped back to us. Another textile company offsets over 65,000 gallons of foreign oil per year through the burning of waste oils for steam production.

Both of these operations meet the primary objective of RCRA, but neither would be cost effective if they were subjected to the subtitle C requirements. Air emissions should, and are being controlled under the Clean Air Act; Connecticut, Indiana, Maine, Massachusetts, Rhode Island are but a few States we are aware of that control the burning of solvents. There is no need for further control under RCRA.

A third area of concern is the amendment to require permits for hazarous waste treatment, storage, or disposal facilities to address "any release of hazardous waste from such facility at any time." Under this amendment the word "facility" could be misinterpreted to include the entire plant, not just the operation being permitted. This could be interpreted to require a hazardous waste permit for a storage facility to address releases from the plant's wastewater treatment operations which are already addressed under the NPDES program or from an inactive or closed portion of the facility from which a permit is not being requested.

Last—but critically important is the proposed amendment regarding common law remedies. The amendment is an attempt to overturn the *Milwaukee* decision in which the Supreme Court rules that Federal common law had been "preempted" by the Clean Water Act. We oppose the amendment. The courts should not be encouraged to second guess administrative permit decisions. Industry is currently required to expend considerable sums of money and invest significant amounts of personnel time to comply with Federal statutes designed to protect against environmental degradation and negative effects on human health.

Unfortunately, after making such expenditures of time and effort, industry is frequently unable to utilize its compliance with these Federal statutes as a defense in the areas of common law nuisances and trespass. The enactment of laws such as the CAA and CWA have appropriately heightened the public's awareness of the need for environmental care. At the same time it has generated a plaintiff's bar that really should not be. The compliance with environmental rules, as established through the administrative process, utilizes the expertise of individuals most capable of dealing with environmental problems and requires the application of the best available technology.

Industry should be able to use its compliance as an effective shield against allegations of common law nuisance and trespass. Subjecting the regulated community to unlimited Federal liabilities despite their compiance with all applicable regulations, will only serve to encourage further lawsuits and become one additional obstacle to the implementation of sound hazardous waste management practices.

Mr. Chairman, we appreciate the opportunity to appear before you. I would like to add that with me today is Mr. Nick Odum, N.S.C. Mr. Odum serves as chairman of the solid waste committee and will assist me in answering any questions.

Thank you.

Senator Chafee. Thank you. We appreciate your testimony.

[An attachment to Ms. Hindle's statement follows:]

ATTACHMENT

State Comparability with RCRA

State	Types of Wastes	Quantity Regulated
Alabama	Same as RCRA.	Same as RCRA, but State allowed to determine where small quantity generators may dispose of their wastes.
California	RCRA plus PCBs, all metals, waste oil and more stringent toxicity criteria. Regs. for recycled waste more stringent.	No small quantity generator exemption
Connecticut	Same as RCRA. However, case-by-case approval required for burning of waste solvents.	Same as RCRA.
Florida	Same as RCRA.	Same as RCRA. However, State regs. prohibit disposal of any quantity of hazardous waste in a sanitary landfill unless municipality requests special permission and meets certain RCRA provisions.
Georgia	Same as RCRA.	Same as RCRA. However, State maintained authority to impose more stringent requirement as they determine necessary.
Indiana	Same as RCRA, but regulates recycling of hazardous waste.	Same as RCRA. However, waste oil which tests hazardous must be treated prior to disposal and general requirement that waste oil be sent to approved specialty landfill site.

State	Types of Wastes	Quantity Regulated
Illinois	RCRA plus "special wastes" may include waste oil.	Small generator exclusion is 100 kg/m for "special wastes". In addition, State rules prohibit disposal of any quantity of hazardous waste without a permit.
Kentucky	RCRA plus required test for waste oil.	Same as RCRA. However, no quantity of waste oil which tests hazardous may be sent to a landfill. Small quantity generators must receive approval by both State and local site.
Louisiana	RCRA plus state listed waste. More stringent toxicity test.	Small generator exclusion on a case-by-case basis only.
Maine	Same as RCRA, requires however, case-by-case approval for burning waste solvents.	Same as RCRA, however, wastes must be sent to licensed facility via licensed transporter.
Massachusetts	RCRA plus waste oil, radioactive and PCBs. State Div. of Air Quality Control regulates on-site burning.	No small generator exclusion.
Michigan	RCRA plus waste oil.	Small quantity generaor exclusion is 100 kg/m.
Mississippi	Same as RCRA.	Less than 1000 kg/m may be sent to Class B landfill, over 1000 kg/m must be sent to Class A.

State	Types of Wastes	Quantity Regulated
New Hampshire	Same as RCRA.	Small generator exemption 100 kg/m.
New Jersey	RCRA plus waste oil, PCBs and some additional wastes.	Small quantity generator exclusion is 100 kg/m.
New York	Same as RCRA, plus requires testing of waste oil.	Over 1000 kg/m same as RCRA. Special state requirements for generators with 100-1000 kg/m and these waste must go to a hazardous waste landfill. All quantities of waste oil which tests hazardous must go to a hazardous waste landfill.
North Carolina	Same as RCRA.	Same as RCRA. However, State solid waste rules requires wastes excluded as small quantity to be treated prior to disposal in subtitle D facility. Local landfill may deny any quantity of hazardous waste.
Oklahoma	RCRA plus PCBS. Waste oils are considered "other industrial wastes" and must be manifested and sent to a recycler, hazardous waste landfill or commercial disposal firm.	Same as RCRA. However, less than 1000 kg/m must either be disposed of in a hazardous waste landfill or receive written approval from State.
Oregon	State does not list waste but regulates by characteristics.	Generators shipping less than 22,000 lbs. per year are excluded from the manifest, however, they must receive approval from State prior to disposal in a non-hazardous waste landfill.

State	Types of Wastes	Quantity Regulated
Rhode Island	RCRA plus additional characteristics. Requires case-by-case approval for burning waste solvents.	No small generator exclusion.
South Carolina	RCRA plus waste oil, battery collectors. Based on proposed '78 regs. More stringent corrosivity test.	Small generator exclusion is 100 kg/m, more stringent reporting transp. & disp. requirements.
Texas	RCRA plus halogenated hydrocarbons.	State solid waste rules regulate all quantities of Class I. Industrial Waste - or mixtures which are toxic, corrosive, flammable, a strong sensitizer or irritant, etc.
Vermont	State regulates 20 classes of wastes including waste oil, requires case-by-case approval for burning solvents.	Small generator exclusion 100 kg/m.
Washington	RCRA plus other state listed wastes. State has special controls for wastes classified as extremely hazardous.	Small generator exclusion is 400 lbs/m
Wisconsin	Same as RCRA. More stringent recycling requirements.	Same as RCRA. However, no quantity of hazardous waste may go to a sanitary landfill.

Senator CHAFEE. As I mentioned before, unfortunately I have to attend a Finance Committee meeting which I am late for now, but Senator Gorton will proceed and he will have questions undoubtedly at the conclusion of the rest of the witnesses.

So, Senator, thank you very much for taking over, and I appreciate all the witnesses coming today.

Senator GORTON. We will hear next from Dr. Charles Johnson.

STATEMENT OF DR. CHARLES A. JOHNSON

Dr. JOHNSON. Good afternoon. I am Charles Johnson, a technical director of the National Solid Wastes Management Association. Today I am representing the two groups within that association that are most directly impacted by the Resource Conservation Recovery Act of 1976 (RCRA), the Institute of Chemical Waste Management made of firms which transport, store, treat and dispose of hazardous wastes and the Institute of Waste Technology, whose members collect solid waste and operate solid waste disposal facilities.

For the past decade, the National Solid Wastes Management Association has campaigned vigorously for a comprehensive and effective Federal program to assume the proper management of hazardous wastes. As we testified before this committee on April 26, we believe that progress is being achieved, but much more can be done.

To begin, let me address the question of resources. EPA has told you that they can do more with less. We agree. The real question is: Will EPA use its constrained resources more effectively to accomplish more? We appreciate the priority which the Agency has placed on its hazardous waste program.

This is an appropriate priority and should be sustained and strengthened by the Congress. On the other hand, we cannot agree with the long-term strategy of EPA to phaseout grants to the State governments which EPA has asked to take over the program.

It has not been and should not become national policy that State governments be forced to use solely their own resources to implement Federal legislation. EPA should not expect to save money through the State authorizing process; it should expect a higher quality product.

Now let me turn next to the points that I wish to discuss today. First on our list of priorities is the so-called small quantity generator exemption. When congress enacted RCRA, it contemplated a system which regulated the management of all hazardous wastes. EPA was not expected or authorized to create a wholesale exemption merely for administrative convenience. This, however, is precisely what has come about. Under the regulations now in place, any generator of less than 1,000 kilograms per month—more than 1 ton—is completely exempt from any regulatory stricture provided he assures that those wastes are taken to a facility authorized by the State to accept industrial or municipal solid waste.

The practice that this sanctions is unconscionable. Generators are permitted—even required—to dispose of hazardous waste by placing those wastes with nonhazardous solid wastes to be taken to a sanitary landfill or a resource recovery facility designed to dispose of nonhazardous municipal solid waste only. The result of this practice has been a series of incidents causing injury to our personnel and damage to our equipment;

A landfill operator in Oregon was severely burned when his bulldozer ran over a partially filled 25 gallon can of caustic paint stripper causing chemical burns over portions of his body.

A trash truck in Pittsburgh caught fire when waste chemicals from a high school chemistry laboratory placed for disposal amid nonhazardous waste reacted inside the compactor truck.

A resource recovery plant in Wisconsin was severely damaged by fire caused by gasoline originally contained in an automotive gasoline tank.

These are the examples of the acute injuries that have resulted from improper disposal of so-called small quantities of hazardous wastes. The environmental insult brought about by the accumulated disposal of small quantities from numerous sources will become apparent only after time has lapsed and wastes have a chance to escape from the disposal facility.

Unfortunately, although EPA lacked statutory authority to do so, the Agency proposed regulations allowing companies which produced 100 kilograms per month of hazardous wastes to be entirely exempt from regulation under RCRA so long as those generators directed wastes to land disposal sites holding valid State permits.

We objected then; we object now. The original proposal of 100 kilograms was broadened, in fact, to 1,000-kilograms under former administrator Douglas Costle. This is the law as it stands. We are presently in U.S. district court challenging the legality of this regulation. Because the issue is intertwined with several other important hazardous waste nanagement issues, we have asked the court for a separate, expedited briefing schedule so that this issue may be resolved.

We have also petitioned the Agency, but we have never been granted a hearing or response. We have mentioned this concern to this committee not only in our April testimony of this year but at virtually every similar opportunity over the past 2 years.

Late in the Carter administration, the EPA announced that in 2 to 5 years, it would reduce the 1,000 kilogram exemption to 100 kilograms. This administration has shown no sympathy and taken no steps to implement such an improvement.

Merely reducing the exemption to 100 kilograms, however, as we pointed out in our opposition to the original proposal, will neither solve nor greatly mitigate the problem.

The problem is twofold: First, bazardous wastes which are placed, without notice, in the midst of conventional solid wastes and handled by refuse haulers and landfill and resource recovery operators as if they were conventional solid wastes, present severe occupational risks to workers. These risks are beyond the control of their employers.

Second, disposal of exempt quantities of hazardous waste in conventional sanitary landfills without notice to the operator of the landfill is risky because the landfill design or operation may not be sufficient to mitigate the hazardous qualities of the waste with consequent environmental threat. Furthermore, even with assurances by State regulatory agencies that certain hazardous wastes can be safely disposed of in conventional sanitary landfills, it is not the State government but rather the private company or municipal agency which operated the landfill which becomes liable for the environmental performance of that facility.

For government to encourage the unknowing disposal of hazardous waste in sanitary landfills is unthinkable.

In this respect, the proposal before the House does not go nearly far enough. The House bill would require that the present 1,000-kilogram exemption be reduced to DOD kilograms within the next 18 months. That is EPA's announced intention already.

The House bill also authorizes EPA to establish a different and presumably less stringent regulatory scheme for generators producing between 100 kilograms or 1,000 kilograms per month. If regulatory flexibility is intended, it is incumbent upon Congress to establish the minimum standards acceptable to assure that all quantities of hazardous wastes are disposed of safely.

Although the language of the House committee report suggests a relatively stringent regulatory scheme for small quantity generators, the language of the bill itself night be misinterpreted to suggest that wastes in the 100 kilogram to 1,000 kilogram class could be handled much as they are today and merely directed to properly licensed subtitle C or subtitle D facilities; that is, conventional sanitary landfills.

Should EPA choose this construction of the language, there would be absolutely no diminution of the substantial threat which presently threatens solid waste collection and disposal companies and their public agency counterparts.

Worse still, wastes produced by generators of less than 100 kilograms per month would be totally unregulated. The House bill provides EPA with the statutory authority to grant such an exemption and would totally preempt our court challenge to such a small quantity exemption.

Many States have recognized this gap in the protection of the Federal regulatory scheme and, under the authority of RCRA, adopted nore stringent rules reducing or eliminating this small quantity generator exemption.

Mr. Chairman, your State of Rbode Island is among those States which have successfully eliminated this exemption. Some of the other States which impose tighter standards than the Federal rule include Illinois, South Carolina, Virginia, New York, and Oregon.

Our second concern which we also stressed in our April testimony, is that present EPA regulations exempt wastes which are combusted in facilities whose primary purpose is other than the destruction of the waste.

We believe this is both irrelevant and unenforceable. It matters not the purpose for which the waste is burned, what matters is the environmental consequences of the burning. These wastes should not be exempted from RCRA. The House bill acts to close this loophole; we hope the Senate will act likewise. You should know that this matter has been in litigation for over a year, and we recently withdrew from settlement negotiations because they reached a stalemate. Prompt congressional action closing this loophole would resolve this issue.

Finally, let me raise an issue that has come to our attention only in the past several days. It is our understanding that the State of Maryland is planning to ask for an exemption from any limitation on the expansion of facilities operating under interim status. The purpose of this is to permit the Maryland Environmental Service, a State agency, to build and operate a hazardous waste dump at Hawkins Point within the city limits of Baltimore. Such an exemption would be unwise for reasons that I will describe. The fact that a State agency would make such a request is symptomatic of a larger issue.

The facility proposed for Hawkins Point is located in a geological setting that is technologically substandard for any type of land disposal. The location is on the shore of the Chesapeake Bay with its fragile ecosystem. The site has a high water table and, in fact, construction at the site has actually intercepted ground water.

The subsurface geology consists of clays interlaced with sand lenses, strata that conduct liquids with little or no resistance. A nearby site operated by a generator has been reported by the Maryland Health Department to be leaking acid to such an extent that the public has been barred from 800 feet of shoreline.

Would a private operator be granted a permit to build a hazardous waste disposal facility on that site? Would a private firm even apply for a permit to build a facility in such a place? We believe the answer is no to both questions.

The larger point arising from the Hawkins Point proposal is the double standard that can arise when a State acts both as operator and regulator.

The Federal Government went through this experience with the Atomic Energy Commission with sorry results. Now we have States proceeding on a course toward the same mistake. States should not be granted variances for operation of facilities merely because they are to be State-operated. Government operations at any level should be held to exactly the same standards as private operations. This matter deserves close scrutiny by this committee and appropriate action beginning first with a refusal to sanction variances for any facilities, whether publicly or privately operated.

I might add that the reason for the Maryland proposal is that there is a great need for hazardous waste management facilities in the State of Maryland. The reason for the need is the fact that the only private facilities in the State have been closed down.

Some waste generators and the State itself have said that they really didn't need new facilities. There are plenty of places to take their waste they said. Now they say they need to bend the rules to develop, what we believe to be a substandard facility.

Senator, I think this would be a very, very unwise decision. As an industry, we are concerned and anxious, as we told you in our April statement, that the permitting process which will apply the final RCRA standards to existing facilities be expeditiously and competently accomplished.

It is critical to the protection of public health and the environment that existing facilities which may not satisfy the final standards be closed. It is essential to our business interests that these "unfair competitors" be removed from the marketplace to establish market conditions which will generate investment in badly needed, modern hazardous waste facilities.

Unless we draw the line somewhere, we will always have a checken-or-egg situation where there will not be enough proper facilities and at the same time, a constant plea that present inadequate facilities be allowed to remain open because of the unavailability of alternative treatment and disposal facilities. It is up to the Congress and to the EPA to make sure that this does not happen.

The preceding panel addressed the question of whether the Federal Government should establish a systen of qualifying private inspectors to supplement the enforcement inspections of Government inspectors.

While reiterating a strong support for a vigorous enforcement program to assure compliance with hazardous waste regulations, we think adoption of such a scheme would be a very bad idea.

Private insurance companies can and do insist that they be allowed to inspect the facility which they have been asked to insure. It takes no Federal law for that.

On the other hand, regulatory compliance inspections are and should remain a function of Government employees. We question whether insurance inspectors have any interest in the full range of procedures that represent regulatory compliance that go far beyond safety concerns.

Examples are manifests, recordkeeping, and analysis, all part of the RCRA mandate. We would add that the decision earlier this spring by EPA to require financial responsibility assurances by companies engaged in hazardous waste management requires either that companies place substantial assets at risk, inducing them to minimize that risk by operating a high-quality facility, or, alternatively, purchasing insurance which would invite an insurance underwriter's inspection. We do not believe that it is necessary or desirable to mandate such a system in Federal law.

We appreciate this opportunity to appear again before your committee and renew our commitment to work with you and with your staff to insure a responsible and effective hazardous waste management program.

We thank you for the opportunity to testify.

Senator GORTON. Thank you, very much for that enlightening testimony.

We will now proceed to Mr. Rasheed.

STATEMENT OF VIC RASHEED

Mr. RASHEED. I am Vic Rasheed. I am executive director of the Service Station Dealers of America, and appear here today on behalf of the SSDA, the Independent Lubricant Manufacturers Association [ILMA], the National Oil Jobbers Council, and the Society of Independent Gasoline Marketers of America.

Together, these groups represent the major portion of independent petroleum product wholesalers and retailers as well as manufacturers of lubricating fluids. Janet Newport, director of legislative affairs for NOJC is accompanying me today.

We are adamantly opposed to an amendment to the Resource Conservation and Recovery Act contained in H.R. 6307 (The Resource Conservation and Recovery Act Reauthorization Act of 1982), (1) which would largely eliminate the "small quantity generator" exemption from EPA's hazardous waste regulations.

Specifically, section 3 of H.R. 6037 would reduce the regulatory threshold for the exemption from 1,000 kilograms to 100 kg of hazardous wastes per month. We estimate that more than 150,000 facilities operated by members of these groups would be unnecessarily subjected to EPA RCRA rules which control storage, labeling, transportation, and disposal of hazardous waste and impose burdensome recordkeeping and permitting requirements.

The expansion of EPA's hazardous waste regulations to include these petroleum product marketers would provide no offsetting benefit to the environment.

Our objections can be outlined as follows:

The amendment would impose unnecessary, costly and burdensome regulatory requirements on thousands of independent small businesses which are actively and responsibly recycling waste materials.

The amendment would discourage the recycling of used oils and would contravene the intention of the Used Oil Recycling Act of 1980.

The amendment is inefficient, unnecessary and would overload EPA's enforcement capability.

H.R. 6307 IGNORES RECYCLING

Gasoline retailers generally dispose of only minimal amounts of materials which are classified as hazardous under the RCRA regulations and fall within the 1,000 kg per month limit for small quantity generator exclusions.

Senator **Gorton**. Excuse me, but the thrust of your testimony is that almost all of them would be covered by the 100 kilogram?

Mr. **Rasheed**. Yes, it certainly is.

These wastes are primarily used oil, (2) spent degreasing solvents, and used batteries. It is ironic that these "wastes" are not wastes at all, but rather are materials which are routinely collected and recycled. These wates have commercial value and are a profit by companies which purchase the oil and transport it to reclaimers or re-refiners.

Likewise, solvents and batteries are recovered and reused. In addition, small quantities of unmarketable oils from the lubricant manufacturing process generally are reused or burned as boiler fuel by ILMA's members.

Under H.R. 6307, if the quantity of hazardous wastes generated exceeded 100 kg, EPA standards could require these small businesses to obtain an EPA identification number; comply with the testing, packaging, labeling, marketing, and placarding requirements; prepare an EPA manifest form for every shipment of waste; verify delivery of wastes to designated disposal facilities; file exceptions reports where delivery cannot be verified; and submit annual reports to EPA.

In addition, our member's operations could become waste hazardous storage facilities requiring complicated permits. EPA regulations allow generators to accumulate hazardous wastes on-site for up to 90 days without a storage permit. Many service stations require more than 180 days to accumulate enough used oil to make it economical for a collector to remove the oil.

EPA compliance requirements for a storage facility could mandate that an owner or operator prepare a closure plan for the facility, and demonstrate financial responsibility for proper closure, plus draft a waste and analysis plan, dual language warning signs, written inspection schedules, training programs, contingency plan and a written operating record.

Section 3 of H.R. 6307 is intended to remedy the indiscriminate disposal of hazardous wastes in landfills. It fails to recognize that most wastes generated at petroleum marketing facilities are beneficially recycled. These wastes not recycled must be disposed of in a permitted disposal facility. Thus, the amendment would not increase the volume of our members' wastes that are hauled. Instead, it would discourage recycling and increase improper disposal.

Service stations provide a valuable community service by acting as collection centers not only for the wastes generated at the station, but more critically for the used oil generated by "do-it-yourselfers"—a growing segment of the motor oil market.

by lowering the small quantity generator exemption level, H.R. 6307 will discourage these retail outlets from serving as collectors by increasing costs to these small businesses. Costly and complicated regulations will force many service stations to close service bays and eliminate waste oil collection facilities.

In a time when the recession and high interest rates have combined to drive many thousands of small businessses out of the marketplace, there is no justification for imposing regulatory costs on industries that are not considered to be the cause of environmental problems. The Regulatory Flexibility Act recognizes the appropriateness of a separate standard for small businesses.

By imposing unnecessary compliance costs the bill will discourage recycling, which thwart the intent of the Used Oil Recycling Act of over the disposal of used oil away from "do-it-yourself" motorists. The elimination collection sites will prompt improper disposal by do-it-yourselfers of a valuable, reusable commodity and natural resource.

I would also like to touch on a question that Senator Chafee asked, and that is by lowering the exception from 1,000 to 100, would that not encourage more ways to find itself into the waterstream, and the answer is it certainly would not, by lowering it there would not be any improvement to the current situation if you were to lower it to 100 than the current 1,000.

The big problem is that today we have the oil gets into the landfills not coming from service stations or from regulated generators, such as our members. It is coming primarily from the do-it-yourselfer who changes his oil and puts it in a chlorox bottle and dumps it in his trashcan and thinks he has done his duty.

He does not realize it will be picked up and taken to the landfill and find its way into the waterstream. He is not covered by any exemption.

I think the problem is not the industry itself; I think it is doing a very good job of regulating itself. I think it is the uncontrolled elements, primarily the individuals who don't realize the environmental damage that they are doing by making small deposits of materials which are really hazardous waste.

That concludes my statement and I thank you for this opportunity to testify before you.

Senator GORTON. Thank you.

Mr. Lennett, please don't read all 33 pages.

STATEMENT OF DAVID LENNETT

Mr. LENNETT. I was going to talk about only two points, and those are the role of the citizens in imminent hazard cases and the lack of existing compliance monitoring.

The testimony will begin on page 4 where I am reading from:

> The recent decision of Judge Curtin in *United States* v. *Hooker Chemical and Plastics Corporation,* No. 79-989C, raises several issues concerning the role of citizens in imminent hazard cases.
>
> These issues are whether citizens have a statutory right to intervene in imminent hazard cases brought by the government and whether citizens can bring their own imminent hazard actions.

In this case, organizations representing citizens from an area surrounding the Hyde Park landfill and a nearby property owner sought to intervene in a case brought by the United States against Hooker Chemical Corp. for creating an imminent hazard pursuant to section 7003 of RCRA, and for violating the Clean Water Act, among other allegations.

They sought to intervene as a matter of right under both the Clean Water Act and RCRA. Judge Curtin granted their motion as it applied to the Clean Water Act violation but rejected section 7002(b) of RCRA as a basis for intervention as a matter of right in imminent hazard cases brought under section 7003. His reasoning was that intervention is a matter of right under RCRA only in an action brought by EPA for violations of a "permit, standard, regulation, condition, requirement or order" and that an action to seek abatement of an imminent bazard is none of those things. Judge Curtin's ruling applies to intervention applications by States as well.

At the very least, Congress needs to clarify the status of intervention applications in imminent hazard cases, for there are courts which have reached the opposite conclusion and have ruled RCRA authorizes a statutory right to intervene.

Without a statutory right to intervene, intervention as a matter of right must be sought under rule 24(a) of the Federal Rules of Civil Procedure, which requires the applicant to prove the United States is not adequately representing his interests.

This can be a difficult burden to meet since a very strong showing of inadequate representation may be required in cases where it is assumed the United States is representing the public interest.

Permissive intervention may also be sought pursuant to rule 24(b), but this is a matter wholly within the discretion of the court, and the court may consider the additional time the applicants may require in the litigation as grounds for refusal.

In addition, the timeliness of an application for intervention is held to a more rigorous standard if intervention is merely permissive.

EDF believes Congress should provide citizens and the States an explicit right to intervene in imminent hazard cases under 7003 of RCRA for two reasons.

First, as parties with a clear and substantial interest in the outcome of these cases, citizens should not be forced to expend considerable effort at best, or denied an opportunity at worst, to make themselves heard.

Second, these highly motivated parties have much to offer in terms of insuring a quality resolution of these cases. The *Hyde Park* case is instructive in this regard. The court there noted that the briefs and memoranda filed by the applicants for intervention were "most helpful and informative," and served to convince the court that many questions regarding the proposed settlement decree remained unanswered and many concerns had not been addressed.

In the end, the court approved the decree, but only after a complete and fully developed record was compiled.

Judge Curtin's interpretation of section 7002(b)(2) impedes parties other than EPA from bringing their own imminent hazard actions under section 7003 in addition to limiting their rights of intervention.

Section 7002(a)(1) of RCRA authorizes citizen suits against any person who is alleged to be in violation of any "permit, standard, regulation, condition, requirement, or order."

Applying Judge Curtin's reasoning to section 7002(a)(1) leads to the conclusion that the citizen suit provision cannot be invoked to abate imminent hazards. It thus limits citizen suits to those concerning enforcement of RCRA regulations or permits only.

We do not believe the role of citizens should be limited in such a fashion. Citizens ought to be able to file citizen suits to seek abatement of an imminent hazard. EPA and the States will not be capable of addressing the universe of imminent hazard sites in an expeditious manner.

When the superfund priority list expands to 400, EPA's task and the task of the States will increase substantially, especially considering the current policy which prefers enforcement activity over fund-financed response actions. Furthermore, there are a significant number of problems sites which will not make the list of 400.

Citizen suits can perform a valuable supplementary role in filing lawsuits to obtain cleanups. For example, EDF recently filed a citizen suit against an owner/operator in Virginia for storing hazardous waste without qualifying for interim status. Because neither EPA nor the State of Virginia wished to apply its resources to enforce RCRA's requirements in this case, EDF filed suit and prevailed in district court.

There are other organizations ready and able to assume a similar role concerning imminent hazard cases, particularly the citizens and local governments who are forced to live with these imminent hazards on a daily basis.

For example, a group of citizens of Woburn, Mass., filed suit against two companies seeking, among other things, the cleanup of leachate originating from the property of those two companies.

The prospect of compensation for the costs of litigation from the responsible party pursuant to section 7002 of RCRA should serve to increase activity in this area.

I think EPA made a couple of statements today about the inspections they have performing that are misleading.

A credible compliance monitoring program, according to Agency standards, is one which provides for annual inspections of all major facilities (that is, land disposal facilities and incinerators) and annual inspections of half of the nonmajor facilities.

In addition, a credible program should also provide for, on the average, inspections of 20 percent of the generators and transporters each year (or a visit once every 5 years). Given that there are estimated to be 2,136 land disposal facilities, 7,858 treatment and storage facilities, and 63,318 generators and transporters of hazardous waste nationwide, approximately 18,729 yearly inspections are currently necessary for a minimally adequate compliance monitoring program.

In 1981, 6,250 inspections were performed by EPA and the States. Through May 1982, about 5,400 inspections have been performed. Thus, one can estimate 8,100 inspections will be performed in this fiscal year at the current pace. The outlook for improvement in fiscal year 1983 is doubtful. EPA, which was responsible for 1,700 of the inspections in 1981 and over 15 percent of the inspections in fiscal year 1982, has requested only 51.4 full time equivalent positions for hazardous waste enforcement in fiscal year 1983, a reduction from 103.1 FTE's in fiscal year 1982.

And about one-third of those remaining, 51.4 FTE's, will be devoted to State program oversight, an important function but not pertinent to the instant discussion.

In addition, the subtitle C grant money to the States may be reduced from over $41 million to about $35 million, should Congress go along with EPA's request. About 35 percent of State grant money is projected for enforcement activities.

These numbers form the basis of EDF's opinion that the current inspection program is not minimally acceptable and that likely future resources are inadequate for the task at hand.

The Hartford Steam Boiler Inspection & Insurance Co., to its credit, has suggested a solution to part of the problem—the shortfall in facility inspections. EDF believes the Hartford Steam Boiler proposal has some serious shortcomings, however, which will be discussed below. Therefore we do not believe that their proposal represents the optimal solution.

There are two alternative approaches to improving the inspection program under RCRA. One, the approach taken by H.R. 6307, is to authorize and then appropriate additional funds to EPA and/or the States to fill, at least partially, the resource gap. H.R. 6307 authorizes an additional $1.9 million for enforcement activities at EPA.

The other approach, which is the one EDF seeks to advance today, is the use of fees to pay for the compliance monitoring portion of the subtitle C program. The Government would retain the primary responsibility for compliance monitoring but would not rely on general tax revenues to perform this function.

The concept of a fee system for compliance monitoring is not a new or radical idea. In a January 1979 report entitled "Hazardous Waste Management Programs Will Not Be Effective: Greater Efforts Are Needed," GAO notes that in 1974 OMB directed EPA to investigate methods to help State programs become self-supporting.

At the time, EPA considered a fee system but rejected the concept because of perceived opposition from State and local officials. However, most EPA and State officials with whom GAO discussed the concept in 1978 supported the fee system approach.

In fact, at least 20 States now have fee systems as part of their hazardous waste management program. Most of the fee systems cover the permit application process costs and do not now cover compliance monitoring costs.

However, several States have established fees specifically for compliance monitoring. Two such States are New Jersey and Oregon. New Jersey imposes a $500 per quarter fee on facilities accepting hazardous waste.

Oregon requires a $5,000 fee for disposal sites, some of which is for compliance monitoring. In addition, Oregon will implement a compliance monitoring fee system for storage and treatment facilities beginning July 1, 1983.

One other State, Arkansas, charges the facility owner/operator in advance on a case-by-case basis for anticipated inspection costs. In California, Louisiana, and Ohio, fees are intended to cover the complete cost of administering the hazardous waste control program, presumably including the cost of compliance monitoring. It should be noted that the fees collected in these programs to date have not been sufficient to fully fund the programs.

There are significant advantages to a fee-based compliance monitoring program, some of which would apply to any similar user fee system:

One, the program will be self-sufficient. Thus resource needs will be addressed and budgetary projections will be stabilized;

Two, the cost of the program will be placed upon those entities creating the need for the program. Consequently, the price to consumers of products associated with such entities will more accurately reflect the cost of the product;

Three, the program may encourage public confidence because it offers a credible and stable inspection program. This can only help alleviate some of the concerns raised by the public when they are faced with a proposed facility in their community; and,

Four, a credible inspection program will discourage compliance avoidance within the regulated community, thereby reducing the prospect of recalcitrant companies gained competitive advantages over the more responsible members of the regulated community.

The fee system should be as simple to implement as possible. We envision a system based on no policy considerations other than the amount of man-hours per year required to inspect a particular type of facility.

Land disposal facilities might therefore pay one fee, treatment and storage facilities another, and generators and transporters a third. Combination facilities may necessitate another category. The need for simplicity would argue strongly against attempting to differentiate within classes of facilities based on distinctions such as on-site/offsite, the size of the facility, or the degree of hazard of wastes at a particular facility in setting the size of the fee.

The actual amount of revenue which needed to be collected would determine the amount of the fees. It would be calculated by tabulating the resource needs of EPA and the States for the number of projected inspections necessary to achieve a credible inspection program for that fiscal year.

The Federal Government would be the collecting agent for the fees and would distribute the money to the States according to those resource projections.

Two approaches appear possible for setting the amount of the fee. One is to set the fees in a rulemaking context; the other is to set the fees within the budget process in Congress. The rulemaking option is probably the simpler of the two.

Thank you for your attention.

Senator GORTON. Thank you.

STATEMENT OF JOEL HIRSCHHORN

Mr. HIRSCHHORN. I will just highlight my testimony.

First, when EPA proposed the smaller cutoff of 100 kilograms per in 1978 the overwhelming response from the States was against any such exemption and many useful alternatives were suggested.

Second, the major concern of the States and other interested parties, intense in 1978, has increased today because of continued information on leaking landfills. The exemption of small generators has led to continuing disposal of much hazardous waste in subtitle D sanitary landfills which are not designed to contain or destroy hazardous wastes.

Many exempt generators can send their hazardous waste to a single sanitary landfill, generally without any records of the extent of the situation, nor warnings of any kind to the landfill operator of the increased risks to workers.

State officials appear to be more acutely aware of this problem than EPA is. Moreover, there is concern that many sanitary landfills may require remedial—superfund—cleanup in the future.

About half of the sites on EPA's current interim superfund priority list were facilities that accepted both hazardous and ordinary solid wastes without any measures used, such as landfill liners, to contain the waste. And this is the case now with countless sanitary landfills.

Third, at least 20 States, including 5 of the Nation's 10 largest waste generating States, have either no small quantity exemption, have more stringent requirements with regard to quantity than EPA's exemption, or do not allow hazardous wastes from small generators to be disposed in sanitary landfills.

Half of those States that have the same quantity cutoff as EPA have some form of reporting requirement to keep track of the exempted waste and its disposal, or limit disposal options.

I would note that EPA's estimate of the increase in newly regulated firms is too large since many firms are already regulated by the States.

Fourth, most States have informed OTA that data on wastes generated from firms producing less than 1,000 kg per month, although far from being complete or precise, exists. However, most States do not have the resources for analysis of the data or development of computer systems for data retrieval.

Fifth, 16 States have limited data on waste generated from those producing less than 1,000 kg per month or are able to make an informed estimate based either on information they have collected or on knowledge of their State industries.

The attached table summarizes the available information. For those States providing estimates, the values of the contribution from small generators—less than 1000 kg per month—of the total amount of hazardous waste generated vary substantially, from less than 1 percent to over 10 percent.

Most States providing information have estimated that small generators account for over 1 percent of the total amount of hazardous waste generated annually in a State.

Sixteen States estimate that the percent from small generators ranges from about 5 to over 10 percent of the total amount of hazardous waste in the State. Six of the Nation's ten largest hazardous waste generating States indicate that wastes from EPA exempt small generators is about 5 percent or, in some cases, greater.

Sixth, some States have also said that they would probably have developed more stringent regulations concerning small generators if they were not so concerned that such actions might impede final authorization from EPA for them to assume control of their waste programs.

Moreover, 16 States appear to have legal prohibitions against having regulations more stringent than EPA's. Both of these factors explain why, in the detailed findings in the appendix, a number of States having the EPA exemption have stated publicly that making such an exemption on the basis of some quantity cutoff is undesirable.

I would also note that waste from small generators might represent a relatively high fraction of the waste transported offsite to treatment and disposal facilities.

A likely range is from 10 to 50 percent.

These are the conclusions of our studies and the detailed findings are in my formal statement.

Our findings suggest a basis for near-term policy concerning the regulation of smaller hazardous waste generators that: one, reduces the quantity cutoff to the 100 kg per month level originally proposed by EPA; two, brings more waste generators under regulation so as to minimize use of subtitle D sanitary landfills for hazardous waste; and three, provides flexibility to EPA and the States for establishing necessary variations in regulations for smaller generators.

In the long term, however, many States believe that a more effective way to establish variations in level of regulation and control technology, or to select exemptions, is on the basis of some type of degree-of-hazard classification system. Such a system appears feasible eventually, on the basis of preliminary work by OTA and the experience of several States with such systems.

However, as EPA has not made a commitment to designing a national degree-of-hazard system, it is not now practicable to use degree-of-hazard as a way to decide whether particular wastes should or should not be exempt, even if generated in small quantities.

Moreover, the resources provided to the States by EPA have been insufficient to obtain and analyze the necessary data to apply any degree-of-hazard system.

It is necessary to bring now exempt small generators into the regulatory system, in those States that have EPA regulations, to form a critically needed data base on types and amounts of waste as well as current treatment and disposal methods. Here, too, however, the uncertainty is the level of funding provided to the State programs.

Senator GORTON. Thank you.

STATEMENT OF ALAN M. LINDSEY

Mr. LINDSEY. Good afternoon. I am Alan M. Lindsey, director, Environment of International Paper Co., a member company of the American Paper Institute and the National Forest Products Association. I am also chairman of the API/NFPA Solid Waste Committee. I would like to thank the chairman and the members of the subcommittee for allowing me to testify this afternoon on behalf of the API and NFPA with respect to the issues involved in the reauthorization of the Resource Conservation and Recovery Act. API and NFPA are national trade associations of the forest products industry which represent over 2,000 member companies who own and manage forest lands and manufacture solid wood products, pulp, and paper.

Since its early developmental stages, I have been extensively involved with the RCRA statutory and regulatory program. I have come to appreciate the complexity and the nuances of the program, and more importantly, the problems it is attempting to address. I have also come to appreciate EPA's difficulties in applying such a program to the real world; and for industry, the difficulties of complying with the program.

In this regard, let me make one clarifying and important point. The forest products industries are not high-risk industries; their major waste streams generally are not hazardous. Therefore, they provide good examples of the adverse and unintended effects on industry that can result when complex regulations such as those under RCRA are drafted with major hazardous waste management facilities, high-risk wastes, "bad actors," and problem sites in mind, but then is applied across the board to industries only marginally involved with hazardous wastes. For example, some of the amendments in the House reauthorization bill, H.R. 6307, would cause irrational regulation of industries such as ours in a statutory attempt to correct some truly bad situations.

Moreover, we question whether now is the time to be making far-reaching statutory changes instead of developing regulatory experience and regulatory solutions to the problems. The RCRA regulatory program is still in its infancy; some parts are not yet promulgated. Problems have been discovered, and will continue to be discovered. However, we have yet to learn the true parameters of many of these problems and we are not confident that we have found the best solutions.

Now is not the time to be freezing proferred "solutions" into statutory language. Now is the time to give the agency the flexibility to create, develop, and fine tune regulatory responses, based on developing regulatory experience and focused regulatory analysis. Statutory amendments should be made only when it is established that statutory provisions are the cause of the perceived problems. In particular, we believe the net result of adoption of many of the amendments in H.R. 6307 would be a direct, adverse impact on the implementation of the RCRA programs and the achievement of RCRA objectives.

Allow me to address, in this context, some of the specific issues raised by this subcommittee.

RECYCLING OF HAZARDOUS WASTES

The issue of recycling of materials that could be considered to be hazardous wastes, including burning and blending materials as fuels, is particularly complex. There is a fine line between materials that should be regulated under RCRA and those that should not. Moreover, the proper amount of regulation of hazardous waste recycling, without discouraging recyling, is difficult to ascertain. EPA has been grappling with these issues since the 1976 enactment of RCRA and more intensively over the last year and a half in the context of litigation negotiations. These negotiations have highlighted the problems with the RCRA program's scope and the difficulty in defining and regulating the recycling of hazardous waste.

Without doubt, there are harzardous waste recycling practices that should be regulated under RCRA. However, these typically are sham operations or clearly disreputable practices, not legitimate manufacturing operations. We believe that EPA already has the tools to address these practices and facilities that need regulation, without seeking additional broad brush remedies.

The approach of H.R. 6307 to the hazardous waste recycling issue, in particular, is extremely troublesome, because it runs well over that fine line. Sections 6 and 11 of H.R. 6307 have substituted the phrase "substances identified or listed under section 3001" for the term "hazardous wastes."

A major problem with this change would be trying to determine what materials are included in the phrase "substances identified or listed under section 3001." This phrase apparently would apply the RCRA hazardous waste program to materials that no one considers to be, or has ever considered to be, wastes. Further, it would extend the regulatory program for hazardous waste management into many ordinary and established manufacturing and production processes.

Three categories of examples in the pulp and paper industry exemplify the problems involved. The first and most important is pulping liquors and recovery furnaces. In several different pulpmaking processes, chemicals are used to digest wood chips, and after the digesting stage, the spent chemicals are removed from the product stream. Not all of the spent chemicals are hazardous. Some, though, may be corrosive, depending on the process and the particular system. The quantities are large, approximately million gallons per day for a typical 500 ton/day Kraft pulp mill. These spent chemicals are then burned in recovery furnaces that are regulated under the Clean Air Act to recover the chemicals for reuse in digesting wood chips and to recover significant quantities of energy as wood sugars and other wood constituents are burned off. Some of these pulpmaking processes, such as the Kraft process, were developed with the recovery stage as an original and integral part of the pulpmaking process. Indeed, the Kraft process is not economically viable without recovery of both the chemicals and the energy.

Other of the processes, such as the sulfite liquor process, were originally developed without reuse of chemical; the spent chemicals were simply discharged into nearby streams, rivers, and ponds. Because of the Clean Water Act programs, material and energy recovery stages were developed for these processes to eliminate the discharge.

H.R. 6307 could now force the regulation of the recovery stages of these established manufacturing processes, creating an unnecessary burden of additional and duplicative regulatory costs. Furthermore, it could characterize our manufacturing facilities as hazardous waste management facilities, which would raise tremendous and unwarranted concerns in the public's mind with respect to siting.

A second example involves turpentine, which is a valuble byproduct of the pulping process that has always been recovered, but because it is ignitable, it would be regulated under section 11 of H.R. 6307. It is not a formerly discarded waste with a new use; it is not properly within RCRA.

A third example involves lab chemicals and their ordinary use in a laboratory could potentially be characterized as recycling and thus become regulated activities subject to full permitting under RCRA.

Simply put, the H.R. 6307 phraselogy "substances identified or listed under section 3001" is undefined, ambiguous, and overbroad.

As noted, EPA has been grappling with these issues and now is developing a package of selective, tailored regulations for recycling of hazardous waste. These regulations attempt to draw a rational line between regulated and unregulated activities and to focus the regulatory requirements as necessary. Most likely, this regulatory package will need adjustment as experience develops and practices change. Thus, until the program is fully implemented and the problems and solutions are clear, it should not be frozen, unnecessarily, into statutory language.

The subcommittee has also questioned whether clarification is necessary to assure the availability of common law remedies. API/NFPA believe that adequate common law remedies are already available and are expanding. "Clarification" in RCRA is thus unnecessary, and attempted clarification, such as is in section 10 of H.R. 6307, may only impede implementation of the RCRA program.

RCRA, as presently in effect, does not restrict any State statutory or common law remedies or other Federal statutory remedies; indeed section 7002 (f) of RCRA expressly preserves these remedies. Therefore, any injured person has a full array of legal tools clearly available, including the expanding State common law bases of liability. Therefore, "clarification" as to available remedies is unnecessary.

Attempted clarification, though, as in section 10 of H.R. 6307, could impede implementation of RCRA by potentially encouraging unrestrained, judicial interference with permitting and other regulatory decisions. Section 10 may encourage judicial development of a new, duplicative cause of action—Federal common law nuisance—unrestrained by any consideration of the RCRA statute, program or goals. A private party could bring suit in Federal court to change the conditions of a RCRA permit based solely on alleged adverse effects on the individual. In structuring relief, the court would not necessarily be restrained by Clear Water Act, Clean Air Act or even RCRA considerations or objectives, nor would it be restrained by the permitting agency's record or reasoning. The private party need not even have appeared before the agency or made his concerns known.

The full ramifications of this amendment are complex and unclear. In 1981 a parallel provision was dropped from the Senate Clean Water Act amendments until it could be fully considered and understood. At the time, Senator Stafford and Representative Roe promised hearings on the change in 1982. API/NFPA believe that this promised hearing procedure should be followed for such a potentially far-reaching change, as opposed to the "technical amendment" procedure that has been used for the House amendments to RCRA.

SMALL GENERATOR WASTES

A somewhat controversial aspect of the RCRA program, at least recently, has been the regulation of hazardous wastes from small quantity generators. Small generator hazardous wastes are claimed to pose a threat to the employees and operations of sanitary landfills and to the surrounding environment. However, we believe that the primary problem is not small generator wastes, but is instead misstatements by unscrupulous or careless generators.

API/NFPA member companies have found that most landfill operators demand certification of the nature of a generator's wastes, and often the nonhazardous waste facilities refuse to accept hazardous wastes from a small quantity generator. Indeed, transporters will not accept hazardous waste from small quantity generators without a manifest. These small quantity generator wastes are thus actually being sent to RCRA hazardous waste facilities, or are being knowingly accepted by nonhazardous waste facilities, usually pursuant to State review or authorization.

The damage incidents appear to have caused in good part by generators who have misstated to the waste management facilities the hazardous nature of their wastes. These generators are not likely to change their practices in response to a mere statutory change. What is needed for this problem is better enforcement of existing statutory and regulatory provisions at the Federal and State levels.

Purportedly to address the problem, section 3 of H.R. 6307 essentially would lower the regulatory small quantity generator level from 1,000 kg per month to 100 kg per month. API/NFPA believe that this change would create tremendous administrative and industry costs with minimal environmental benefits. The EPA rulemaking record demonstrates that such a lowering would bring an additional 130,000 generators into the RCRA system, but the additional hazardous wastes brought into the system would amount to less than 1 percent of the hazardous waste generated in the United States.[1]

The section 3 amendment would thus impose additional Federal regulatory burdens on the responsible companies and substantially greater administrative burdens on the Agency, without significantly changing the disposition of small quantity generator hazardous waste and without doing anything to catch the major problem causers, the "cheaters."[2]

NONHAZARDOUS WASTE ISSUE—MATERIALS RECOVERY

Finally, we would like to alert the subcommittee to a problem in the nonhazardous waste section of RCRA, subtitle D, that poses a threat to the existence of the paper recycling industry.

It is clear from the objectives and legislative history of RCRA that Congress sought to establish a balance between materials recovery and energy recovery in solid waste management planning and we support this. However, contrary to congressional intent, some State and municipal planning efforts have promoted energy recovery from wastes to the exclusion of materials recovery. For example, in determining the capacity of their waste-to-energy facilities, certain jurisdictions are sizing the plants so as to require the burning of recovered materials as well as solid waste and are adopting policies which give local government exclusive control over the disposal, and in many cases burning, of all municipal wastes including recyclable materials. These policies could have a severe impact on the availability of the raw material of the paper recycling industry and in some cases effectively eliminate private markets for recyclable paper.

In the paper and paperboard industry there are about 500 mills which processed a total of 16 million tons of recycled paper last year; in addition, 2 million tons were collected for export. This 18-million ton level, representing a 50-percent increase in collections over the last decade, accounts for 23 percent of the fiber used to produce paper and paperboard used in this country. Recyclable paper is an industrial raw material with established values and markets which has historically traveled in interstate commerce. In fact, recyclable paper is a world commodity and the United States ia a major exporting country. It should not be lumped together with waste that is discarded and not recycled.

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[1] 45 *Fed. Reg.* 33102-03 (May 19, 1980). Eliminating the small quantity generator provision entirely would bring in almost 700,000 additional generators with less than a 1% increase in regulated hazardous waste.

[2] A similar problem of unnecessary diversion of administrative and industry resources is raised by section 7(b) of H.R. 6307, which would force the Agency to process permits for all expansions of existing hazardous waste management facilities of more than 10 percent of capacity. Under the existing regulations, EPA must be notified of any expansion, and if EPA considers the expansion to be material with respect to the environmental risks, it can call and process the facility's permit. Conversely, if the expansion is not material, such as the expansion of a drum storage area at a large manufacturing facility from 50 to 75 drums, the Agency need not allocate its resources to the facility at that time. Under the amendment, thought, the Agency is required to process the permits for all expansions over 10 percent of existing capacity. Thus, it must either divert administrative resources from higher permitting priorities or prevent companies from undertaking necessary expansions of regulated hazardous waste management facilities.

The need to clarify congressional intent on the importance of materials recovery to comprehensive solid waste management planning is particularly urgent in light of a recent court decision addressing the legality of municipal control of solid waste including recyclables. In this case, *Akron* v. *Hybud Equipment Company,* the U.S. court of appeals (sixth circuit) addressed the policy question of whether "private markets should be replaced by municipal control of recyclable wastes."

The court held that: "The policy question here, in our judgment, is debatable and should not be taken out of municipal hands by Federal courts in the absence of congressional intent clearly expressed."

The U.S. Supreme Court recently remanded the case to the lower court for reconsideration in light of recent court decisions.

We believe that the reauthorization of RCRA presents the Congress with an opportunity to clearly articulate such a policy and reaffirm its intent that solid waste management planning strike a balance between energy and materials recovery.

We, therefore, propose the following amendments to RCRA:

Amend section 4001 of the Resource Conservation and Recovery Act by striking the period at the end thereof and adding the following: "In developing such comprehenseve plans, it is not the intention of the Act to interfere with the private sector's access to the recoverable material portion of the solid waste stream for its use as an industrial raw material."

Amend section 4003 by adding a new subsection(c) which reads: "Notwithstanding any of the above requirements, it is not the intention of this Act or the planning process developed pursuant to this Act to interfere with the private sector's access to the recoverable materials protion of the solid waste stream for its use as an industrial raw material."

CONCLUSION

In conclusion, there are problems with the RCRA hazardous waste program and there are problems with hazardous waste management. However, API/NFPA believe that adequate tools already exist in RCRA, and other environmental statutes such as superfund, to address these hazardous waste problems. In particular, API/NFPA believe that the Agency should increase enforcement of existing requirements. Congress should not, however, substantively amend the RCRA hazardous waste statutory provisions until the RCRA program is fully promulgated and has had a chance to mature, until the purported problems have been clarified and defined, and until the true solutions are clearer.

Thank you very much.

Senator GORTON. Thank you.

STATEMENT OF WENDALL J. CLARK

Mr. CLARK. I am Wendall Clark. I am an employee of Texaco, Inc., and cochairman of the RCRA task force of the American Petroleum Institute. This API group has the responsibility for assessing the impacts of solid and hazardous waste laws and regulations on the industry and providing input to EPA and other Government bodies.

I would like to say at the outset that API strongly supports reauthorization of RCRA without substantive amendments. We prefer the bill which has been presented by your committee. We are aware of the concern over the progress being made by EPA in developing the regulatory program, and everyone's wish to see something done to speed it up. We believe, however, that changing the statutory requirements and adding additional burdens at this time will produce the opposite effect. Such changes would disrupt progress just as the program is beginning to get underway.

The extreme complexity of the problem was totally underestimated when RCRA was first enacted. As a result, that has forced EPA into this careful effort. Now, however, most of the basic regulations have been promulgated, the rest are expected soon, and the States are well into the process of public programs being enacted, and the more serious problems are being addressed. This has been said several times already today, this is not the time for Congress to rewrite the statute and start changing the ground rules.

Moreover, we think, as Mr. Hirschhorn just said, we need more information. Your committee has recognized that need by its call for a study by the National Academy of Sciences, and we believe such studies must be supplemented by input from those being regulated through repeated review and exchange of ideas. Without such input neither Congress nor anyone else can write the type of details as those proposed in the House reauthorization bill without running the risk of creating untenable results.

In your letter to us you asked about the small generator exemption, and that question provides a good example of what I am talking about. The ramifications of that issue are such that even the House committee members themselves could not come to a conclusion on the level of control, but they passed an amendment anyway.

Everyone seems to agree the small generator deserves special attention, so let's give EPA the resources to develop those details. If those rules create a problem they can be adjusted relatively quickly and easily but that ability to make quick and easy adjustment is taken away if the rules are made by legislative fiat.

With respect to small generators the controlling factors at this time should be to focus on priorities. A regulatory program cannot be all things to all people and cannot do everything it wants, and Mr. Chaurman alluded to this question of prioritiy earlier.

Clearly the small generator must be a second priority until the basic program is fully operational. Pushing the program to deal now with massive numbers of small generators can only delay the program.

On the subject of reuse, the broadening of coverage and establishing of too strict controls can easily backfire in the face of those pressing this issue. Such actions could cause used oil collecters to give up in disgust as mentioned before, and then with no viable collections available, the oil may find its way into the toilets and backyards of people having no place to take it.

In addition, the House proposed a time schedule of 4 to 6 years to issue all RCRA permits. This can also be counterproductive by inviting time-consuming litigation.

Let me point out, if the permits represented by the 14,000 part A applications so far received by EPA are to be issued in 4 years, EPA is going to have to issue 13 final permits per day for the next 4 years.

The impact of that schedule would be further multiplied if smaller generators are added to the book.

I wish time permitted me to cover additional issues, but I think this is sufficient to make the point that complex regulations require extensive input and review from many sources to result in a program workable in the real world. Therefore we urge you to encourage your colleagues to pass a simple reauthorization, and provide EPA with the necessary resources to complete the regulatory program which they already have underway.

Thank you.

Senator **GORTON**. Thank you.

Mr. Moore.

STATEMENT OF WILLIAM P. MOORE

Mr. **MOORE**. My name is William P. Moore. I am environmental specialist for the Rohm & Haas Co. and am testifying on behalf of the Chemical Manufacturing Association. I serve as a member of CMA's RCRA regulations task group. CMA is a nonprofit trade association whose company members represent more than 90 percent of the productive capacity of basic industrial chemicals within this country.

A representative of CMA testified before this subcommittee on April 26 and urged reauthorization of the Resource Conservation and Recovery Act without amendment. Since that date, the House Energy and Commerce Committee has reported H.R. 6307, containing several potentially significant amendments to RCRA. CMA welcomes this opportunity to address these proposed amendments and to discuss one other proposal—the so-called Hartford steam boiler amendment that is being considered by this subcommittee.

In our April 26 testimony we stressed that recycle and reuse are integral and vital features of modern chemical manufacturing. These practices, which significantly reduce the volume of waste that must be disposed, have increased in response to rising energy and raw material costs. Almost every process involves one or more internal recycle streams. For instance, my own company operates a plant producing over 1,400 products; one or more recycle streams are used as substitutes for raw materials in the manufacture of a majority of these products. Accordingly, CMA is very concerned about provisions of H.R. 6307 that may deter recycle and reuse practices and thereby detract from the resource conservation and recovery goals that give RCRA its name.

Section 11 of H.R. 6307 requires the Administrator to promulgate regulations governing "beneficial use, reuse, recycling or reclamation" of hazardous wastes. Regulating as "wastes" all secondary materials destined for recycle or reuse could deter resource conservation and recovery.

A good example is a recent experience of my company. A State, which does not recognize EPA's current regulatory exemption for beneficial use or reuse of secondary materials, effectively prevented reclamation of metals from a spent catalyst by requiring the reclaimer to obtain a hazardous waste management permit. The reclaimer chose not to undertake the trouble and expense of trying to obtain such a permit. As a consequence, we are continuing to land dispose an otherwise recoverable resource.

At the same time, some activities pertaining to reclamation or recycling of secondary materials have been implicated in past incidents involving damage to the environment. Presumably, section 11 seeks to insure that EPA regulates recycling or reclamation to the extent necessary to minimize such damage

CMA is concerned, however, that section 11 is so broadly stated that it could be construed to limit the Administrator's discretion in crafting regulations that achieve a reasonable balance with respect to these statutory goals. We recommend amending section 11 to make clear that the Administrator only needs to regulate as necessary to protect human health and the environment by focusing on the types of activities that historically have caused damage to human health or the environment. In doing so, the Administrator should insure that regulations in this area cannot intrude in industrial processes, which often use byproducts, sludges or spent materials as ingredients or as substitutes for virgin raw materials.

Section 6 of H.R. 6307 requires notification by persons producing, distributing, or burning any fuel derived from hazardous wastes. It also requires promulgation of standards under subtitle C of RCRA applicable to such persons, as may be necessary to protect human health and the environment. CMA members are currently cooperating in a comprehensive EPA study to determine whether regulation of burning of waste-derived fuels is necessary.

We expect that the study will reveal that industrial facilities burn secondary materials as fuel in boilers which achieve high combustion efficiencies and, accordingly, that such burning poses no substantial risk of harm. The language of section 6 gives the Administrator the flexibility to choose not to regulate such burning. Nevertheless, CMA is concerned about language at pages 19 and 20 of the House report that states a presumption that all such boilers are to be regulated as though they were hazardous waste incinerators.

We urge clarification in the legislative history of section 6 to emphasize that the Administrator need not regulate all burning of secondary materials in boilers. Rather, the Administrator should have discretion to target regulation on burning of certain kinds of waste-derived fuels in particular kinds of boilers. Absent such clarification, beneficial resue of secondary materials in place of conventional fuels may be unreasonably inhibited.

It should be noted that sections 6 and 11 of H.R. 6307 currently use the term "substances identified or listed under section 3001" in place of the defined term "hazardous wastes." We believe use of the former term will cause unnecessary and counterproductive confusion. We understand, however, that H.R. 6307 is likely to be amended on the House floor to correct this serious problem.

Section 10 attempts to establish Federal common law remedies with respect to possible consequences of hazardous waste management under RCRA, despite the necessary implications for RCRA of the Supreme Court's recent holding in *Milwaukee* v. *Illinois,* (451 U.S. 304 (1981)). Although section 20 may have sweeping legal consequences, the House Energy and Commerce Committee held no hearings on its desirability.

Senator GORTON. I should like to thank all of you for your contributions to this important subject. We do have a number of other formal written statements from people not here as witnesses, each of which will be included in the record.

Senator GORTON. As the chairman of the subcommittee has also said, members of the subcommittee and the subcommittee staff will submit a number of questions to you in writing on which we would ask you to comment.

I have just one or two general questions that I will ask now, you don't all need to comment on it, especially if there are numbers of you who are in agreement, but we will start to take you in the order of which you testified for any brief comments you would like to make.

The first of those questions is, the obvious one that one of the goals of the committee and the original legislation was to transfer eventually management of the disposal of solid and hazardous waste to State and local governments by providing guidelines and regulations which the States at appropriate times can assume.

Particularly for those of you who represent industrial groups, and then I think the two of you in the middle can comment on it, what is your opinion about how adequately States or some States have taken over or have suffered under the Federal program?

Miss HINDLE. I would like to address that, and I refer you to our chart where we surveyed the 25 States having textile operations, and 18 of these presently have found it necessary to give more stringent regulations than the Federal requirements regarding small generators. And I have heard some other comments here this afternoon by States we may not have surveyed. So I would say the States have that pretty well under control.

Mr. JOHNSON. We have supported the transfer of the actual administration of the program to the States, and as I said in my testimony, along with this transfer of the administration, should go some continued funding from the Federal Government to carry out this program. I think as far as actual performance by the States, I would have to view it as a mixed bag at this point. Some States are moving ahead very aggressively, other States are languishing, and I think that in some sense is in part an attempt by States to export their hazardous waste program to adjacent States; that unfortunate result has continued despite the court's decisions and even the admonition of Superfund for States to assure availability of program facilities to provide facilities to dispose of wastes for sites cleaned up under Superfund.

Miss NEWPORT. Several references were made to States having zero exemption for small generators, however, looking at those State laws, for example, in Rhode Island, my members tell me that the regulatory burden is not placed on the people, but rather on the transporters of those used materials. Also in New Jersey, after removing the small generator exemption, they did realize that there was enormous enforcement burden which was unfair regulations being placed on the service station industry, and they did put back 1,000-gallon exemption for service stations.

So I think more careful analysis of some of these State programs should be made and realized that there has been some flexibility and some acknowledgement that such burdensome regulations are not needed.

Mr. CLARK. I just wanted to comment on her statements. In New Jersey, 1,000 gallons is 4,000 kilograms, that is four times the exemption.

Senator GORTON. While you are on the microphone, do you want to make a comment?

Mr. CLARK. No.

Mr. MOORE. I do. In a number of States I am familiar with, the program has been picked up, and what we favor, is that the Federal Government needs to continue its strong regulatory leadership, especially in the highly technical areas regulating like incinerators and landfill standards. Some of the only problems we have seen to date is not States picking up the programs, but where they try to write regulations for these facilities such as landfills without the proper guidance from the Federal Government which now, on incinerators has been developed. The States picking up on the program with this strong Federal leadership, we feel is the way to go.

Mr. LINDSEY. I think almost without exception the regional EPA office does not have the resources nor the expertise to enforce their regulatory program, and this is one of the reasons they have been delegating a lot to the States, and I think there is a lot more expertise and resources at the state level than was present in the regional EPA office.

Mr. LENNETT. Senator, I think it is a real mixed bag, as Dr. Johnson said. There are a number of States that had these programs before RCRA was enacted. California is always thought of as a model in that regard.

There are a number of States, however, that basically Xeroxed the Federal requirements and called that their program. And they do that for one or two reasons, one because the State agencies don't want to be in the position of asking for additional regulations, or they are prevented by their statute from doing anything more, and that is what Joel was alluding to, that these 16 States may be legally prevented from requiring additional regulations even though it is a good idea. The resources available at the State levels also varies, and maybe that is going to get a lot worse.

So everyone is in favor of shifting these programs to the States where concerns can be localized, but we are seeing a variety of performance out there and we should be careful how we transmit that authority and we ought to make sure the resources go along with that transfer, and we ought to make sure that where Federal leadership is required, because States have these legislative problems, we should recognize it and do something about it.

Mr. HIRSCHHORN. I think in the context of the New Federalism, there are two clear messages sent to EPA. No. 1, the States want to regulate small generators and the second one is that there are ways of doing this that are flexible and reasonable. Nobody really has suggested that it is now totally feasible to go to complete regulation of these small generators, but that there is an appropriate level of regulation, and in fact as the numbers indicate there is a problem of getting consistancy among the States now.

A high number of States are regulating these small generators in some way and there is a problem for the private sector because of a lack of consistancy among the States, and the way to get that is to provide more of an opportunity, let us say, for all the States to find the appropriate level of regulation for small generators.

Senator GORTON. Thank you.

I would thank the panel and we will submit additional questions to you in writing.

Thank you very much for coming.

[Whereupon, at 3:50 p.m. the hearing was recessed to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

STATE OF MARYLAND
EXECUTIVE DEPARTMENT
ANNAPOLIS, MARYLAND 21404

HARRY HUGHES
GOVERNOR

TESTIMONY OF STATE OF MARYLAND ON S. 2432 BEFORE THE UNITED STATES SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

JUNE 24, 1982

My name is Ben Bialek, I presently serve as Assistant Legislative Officer to Harry Hughes, Governor of the State of Maryland. Accompanying me today is Michael J. Scibinico, II, a State Assistant Attorney General assigned to the Maryland Environmental Service. The Governor thanks you for the opportunity to testify at this hearing and regrets that because of a previous commitment, he is unable to personally appear before you today.

The purpose of this testimony is to briefly relate Maryland's experience in hazardous waste management and implementation of Subtitle C of the Resource Conservation and Recovery Act of 1976 ("RCRA" or "the Act"). In addition, I will focus on one change in the Act proposed by the House Energy and Commerce Committee in H.R. 6307, the companion RCRA re-authorization bill, which could adversely impact Maryland by changing the regulatory requirements for expanding interim status hazardous waste facilities. I have asked the State Department of Health and Mental Hygiene to provide their written comments to the Subcommittee on the other issues raised by Senator Chafee in his June 16, 1982 letter to Governor Hughes.

Maryland faces nearly a complete exhaustion of disposal capacity. To address that problem, the State plans to expand a small state owned and operated landfill which would create an additional 1 1/2 years of disposal capacity. The availability of safe and economical disposal facilities serves as an effective alternative to midnight dumping and promotes industrial stability and growth.

In structuring a positive response to the very real problem of lack of disposal capacity, Maryland has had to work within the RCRA framework. Our ability to bring a new or expanded facility on line within a reasonable period of time has been constrained by the unfortunate delays since 1976 in the implementation of the full RCRA program. Nonetheless, Maryland has, in good faith, proceeded to create additional disposal capacity in accordance with existing regulations for interim status facility expansions. We are confident that Maryland has satisfied existing regulations and that EPA will favorably and expeditiously approve the proposed expansion. However, because of the uncertainty inherent in the timing and passage of the RCRA reauthorization bills, we feel compelled to request a legislative remedy which would assure that Maryland's efforts to meet a critical need is not impeded.

A. HAZARDOUS WASTE IN MARYLAND - AN OVERVIEW

An understanding of Maryland's efforts at hazardous waste management and regulation must begin with a quantification of the scope of its disposal problem as well as a description of existing management and regulatory programs. In 1980, the most recent year for which we have completely evaluated manifests, approximately 427,000 tons of hazardous waste was generated in Maryland. Approximately 127,000 tons of this total was treated or disposed of on the generator's own property, with off-site treatment or disposal requirements for the remaining 300,000 tons. In addition, 55,000 tons of waste was imported into Maryland, with 14,000 tons exported to disposal sites in other parts of the Nation. A total of 341,000 tons of hazardous waste was disposed off-site in Maryland in that year. 350 Maryland industrial firms manifested hazardous waste with an additional 8 treatment, storage, and disposal companies also manifesting. Maryland has had its own comprehensive "cradle-to-grave" hazardous waste management and regulatory program since 1976. State regulations were promulgated in 1977 identifying waste streams to be regulated, requiring manifests, certification of transporters, and the special permitting of both active and inactive hazardous waste storage, treatment and disposal facilities.

The Maryland regulatory program is currently administered by the State Department of Health and Mental Hygiene. On July 7, 1981, the State received from EPA Phase I RCRA interim authorization consisting of generator and transporter regulatory authority. Regulations are currently being drafted which will allow Maryland to receive Phase II, Interim Authorization for treatment, storage and incineration. This will allow the State to draft, review, issue and enforce hazardous waste facility permits in place of the Federal program. In this regard, Maryland applauds the Committee's recommendation in Section 2 of S.2432 for a significant increase in funds for States to undertake adequate hazardous waste management planning and permitting.

Maryland will be seeking hazardous waste land disposal facility permitting authority as soon as EPA makes available the required final design criteria. Importantly, because the Maryland Program is substantially complete for Phase II, EPA has not chosen to call for Part B of the Federal Hazardous

Waste Permit Applications from Maryland industry. Maryland's permitting system authorized by State law is, therefore, the functioning regulatory program at present.

To facilitate inspection and enforcement of state law, regulation, and permit conditions, Maryland has upgraded both its inspection and enforcement capabilities. Three assistant attorneys general function chiefly in the area of hazardous waste enforcement. They are assisted by the Natural Resources Police and six professional grade personnel, comprising a special Hazardous Waste Investigation Team, who have undergone a comprehensive hazardous waste training program. A substantial number of criminal and civil actions have resulted over the last three years.

Maryland is also fortunate to have, as an environmental management tool, a public corporation and unit of state government which operates as a water and waste management utility. Known as the Maryland Environmental Service (MES), it plans, constructs and operates water supply, wastewater treatment and solid waste disposal facilities throughout the State. The legislative purpose in establishing MES in 1970 was to assist industry, local government and other units of State government solve their problems in these areas. For example, MES provided substantial technical assistance to the Maryland Chamber of Commerce in the establishment of the Maryland Waste Exchange to promote the re-use of materials which otherwise might be discarded as hazardous or nonhazardous industrial waste.

Importantly, MES constructed and operates the hazardous waste landfill facility at Hawkins Point for Allied Chemical Corporation which receives the chrome ore waste generated at Allied's Baltimore Works. Allied Chemical is by far the State's largest producer of hazardous waste and accounts for 51% or 128,000 tons in 1980 of the waste generated by the so called "primary" generators (i.e. all sources except Maryland hazardous waste treatment or disposal facilities). A Company initiated and State encouraged lime-free process change is intended to reduce the amount of waste generated at the plant to approximately 80,000 tons per year in the near future.

The Hawkins Point facility is located on State land owned by the Maryland Port Administration and all costs of disposal are defrayed by Allied. Allied maintains a million dollar surety bond for closure, post closure, and the costs of corrective or restorative action, if necessary. MES maintains 5 million dollars in liability insurance for sudden and non-sudden occurrences. The landfill, which opened in August, 1980, received EPA interim status and currently operates under a State permit. Permitted capacity is expected be depleted this summer.

Complementing these programs, Governor Hughes sponsored State legislation in 1980 which established the Maryland Hazardous Waste Siting Program to assure adequate disposal capacity in the State. Pursuant to that legislation, a Hazardous Waste Siting Board was created with the authority to override local zoning for a proposed hazardous waste site upon a determination by the Board of the need for a particular type of facility as well as the suitability of a proposed site.

To assist in making its policy determination on the need for a particular type of hazardous waste management facility, the Siting Board commissioned the firm of A. D. Little Inc., to undertake a "needs" study to assess current Maryland disposal patterns in light of the quantity and characteristics of the waste generated as well as the capacity remaining at existing disposal facilities in Maryland. The Consultant also reviewed treatment and disposal facilities loacted within a 150-mile radius of the Baltimore Metropolitan area. Ninety-six percent of Maryland's hazardous waste is generated within Baltimore City, Baltimore County and Anne Arundel County. The study specifically considered the impending depletion of disposal capacity at the Hawkins Point landfill as well as the Browning Ferris Industries' Solley Road landfill in Anne Arundel County The BFI landfill was recently closed under trial court order after a finding that a three year phase-out period established by an Anne Arundel County zoning ordinance was constitutionally valid.

Following two public information meetings and a public hearing, the Siting Board, among other things, determined that the overwhelming majority of hazardous waste generated in Maryland required landfilling as the only means of disposal. The State's annual landfill disposal capacity requirements were determined to be for 200,000 tons of hazardous waste. Based on the Arthur D. Little report and considering overall system reliability and flexibility as well as the desirability of some price competition, the Siting Board, by regulation, found an immediate need for two or three secure landfills in Maryland. Significantly, the Siting Board found that only 14,000 tons of Maryland waste was in categories which might be incinerable. It also found that aqueous treatment facilities were generally adequate to handle Maryland wastes amendable to treatment.

B. THE HAWKINS POINT EXPANSION

As a result of the Siting Board's determination of State need for landfill disposal capacity and the distinct possibility that the BFI Solley Road Landfill would be shut down the following May, Governor Hughes directed the Maryland Environmental Service in the fall of 1981 to develop a proposal to assure continuity of land disposal capacity in Maryland. MES responded by proposing an expansion of the existing Hawkins Point landfill to create additional capacity for both Allied Chemical's chrome ore waste as well as hazardous waste generated by the other members of Maryland's industrial community.

Importantly, the recommendation to expand the Hawkins Point landfill was consistent with and a product of a siting study that had been conducted by MES concurrently with the Siting Board's "needs" determination. The siting study developed appropriate social and environmental factors and numerical criteria which were then used to guide the screening of the State and to identify more suitable candidate areas and evaluate specific sites. Successive levels of screening criteria and analysis yielded fourteen sites for evaluation and Agency conclusion that the Hawkins Point area in Baltimore had significant advantages which were lacking, at least in part, at all other sites identified.

In recommending the Hawkins Point site for expansion, MES advised that the site has very good clay soil with approximately 120 feet of clay and dense silts lying between the waste area and the top of the uppermost acquifer. Because of the existing landfill use, MES had a great deal of information about the site and had a high degree of confidence in its useability for safe containment of hazardous waste. Moreover, the Hawkins Point area was the only site identified where surrounding community is served by public water from a source which would not be impacted by any combined failure of engineering, construction and site geology. The character of the Hawkins Point area is heavily industrial and, as such, a hazardous waste landfill would seem less intrusive than in the environs of the other sites identified. Finally, the site is in the political jurisdiction where the largest share of the State's hazardous waste is generated and is immediately adjacent to the Baltimore

Beltway, reducing the potential transportation risks to a minimum. Significantly, the site expansion could be implemented rapidly so as to avoid a major hiatus in secure landfill service for Maryland industry.

MES was directed to prepare detailed engineering plans and specs, an operating manual and an environmental effects report and to submit all other relevant data to the Department of Health and Mental Hygiene for review as required for issuance of a State permit. The State Board of Public Works, the highest administrative body in State, comprised of the Governor, Comptroller and Treasurer, loaned MES 2.5 million dollars derived from the sale of general obligation bonds for design preparation and construction of the landfill cell to be used by the general industrial communities. Allied Chemical is to pay the full cost attributable to expansion of landfill cells dedicated solely to the Company's use.

On March 5, 1982, the Department of Health and Mental Hygiene published in the Maryland Register its tentative determination to issue a State permit for facility expansion. After a preliminary comment period on the terms and conditions of the draft permit, a public hearing was held on May 20, 1982 in Baltimore City. In addition, Browning-Ferris Industries, owner of the adjacent inactive Quarantine Road landfill site, has requested adjudication of issues related to permit issuance. A State adjudicatory hearing is scheduled for August 2, 1982. Again, the current application for expansion will provide only 1 1/2 years of additional landfill capacity. Further expansion of the Hawkins Point landfill will occur in the context of final EPA permit issuance.

In addition to satisfying State regulatory requirements, on March 15, 1982, the Maryland Environmental Service applied to EPA and submitted information which would justify approval of expansion of an interim status facility under 40 CFR 122.23(c). Expansion of such facilities is allowed if the cost does not exceed 50% of the capital cost of a comparable new hazardous waste management facility and if a need for the expansion is demonstrated. An EPA decision on the request for approval is expected shortly.

C. IMPACT OF RCRA REAUTHORIZATION BILLS

Though Senate Bill S. 2432 does not substantively alter the process and timing for issuance of RCRA permits, H. R. 6307 as reported out of the House Committee on Energy and Commerce, substantively changes the ground rules under which an existing hazardous waste facility can expand capacity. Maryland does not believe that any change is necessary and consequently prefers that the Senate not act on this issue. H. R. 6307, as currently amended, could adversely affect the Hawkins Point expansion and perhaps put other States in an untenable position in the future should administration of the federal permit program be delayed.

In Section 7(b) of the House Bill, the Committee on Energy and Commerce proposal would limit expansion during interim status to 10 percent or less of the facility's stated capacity in its original interim status application. Any expansion in excess of 10% of capacity must receive a final RCRA permit prior to constructing the desired capacity. The Environmental Protection Agency, or a State which has been granted the necessary authorization, can issue a RCRA permit only after the final standards for that class of facilities under Section 3004 of the Act are effective. Under Section 3010(b) of RCRA, regulations adopted under authority of Subtitle C take effect six months after the date of promulgation.

Thereafter, a permit can only be issued after a draft permit is noticed in the Federal Register, with a comment period of not less than 30 days. 40 C.F.R. Sec. 124.10. A legislative type of public hearing must be called if EPA or the State Director receives written opposition to permit issuance. Moreover, before the close of the comment period, an evidentiary hearing may be requested by interested persons under certain circumstances with provision for certain rights of appeal. 40 C.F.R. Sec. 124.91.

Assuming that regulations are promulgated as expeditiously as possible, and that EPA is able to act on all permit applications for new facilities and interim facilities simultaneously, the earliest theoretical date that a permit could issue without challenge would be one year from the date of promulgation of the regulations. Given that there are alone 9,980 existing treatment, storage and disposal facilities in need of final permits, this schedule seems inconceivable.

More likely, perhaps, is the time table established for review of EPA permit applications in Section 8 of the House Bill which requires a four year deadline for a final permit decision on a land disposal facility for which an application was submitted prior to the effective date of the RCRA reauthorization bill. For other facilities, EPA is given 6 years to make a permit decision. Given the magnitude of administering this national permit program, the only way that facilities can be permitted within a reasonable time is with a prompt delegation of full permitting authority to States. While Maryland is eager to regain that authority, many States may not be so obliging or may simply not have the resources to implement the comprehensive program required under RCRA. As we indicated earlier, Maryland appreciates the recommendation of the Committee for increased financial assistance to the States for this purpose. It is essential to the success of the RCRA program.

The consequences of the proposed 10% limitation may create serious environmental and economic crises for the chief executives of States facing disposal capacity shortages. This is illustrated by Allied Chemical, which, has advised the Governor's office that if the 10% limitation were applied to the Hawkins Point facility, their daily disposal costs would increase five to six fold and would most likely result in permanent plant shutdown. It is not yet known whether it is even technically feasible to transport the chrome ore waste to distant facilities. The Allied Baltimore Works produces a full line of chromium chemicals and 35% of the total U.S. capacity. The economic ripple effect is not difficult to imagine when one considers the plant employs 400 people with a payroll of $11 million. Goods and services purchased locally total approximately $20 million/yr. and it pays direct taxes of $1.15 million and indirect taxes of $700,000. Moreover, the availability of chromium chemicals is of critical importance to many local and national industries as well as to various strategic military uses.

The 10% limitation will obviously also adversely affect the medium and smaller sized generators. Rather than pay extraordinary transportation costs, some firms may be tempted to dispose of their wastes in an environmentally unsound manner. We, in Maryland, are very sensitive to the fact that two Superfund sites have been identified in our State and are in process of being cleaned up. One cleanup operation was just announced last week for an uncontained dump in Cecil County.

Finally, we are unaware of any landfill facility which has been approved for expansion under existing regulations. To our knowledge there has not been a situation where a substantial amount of new capacity has been created as an interim status expansion.

Consequently, we seriously question the need for any change in the law governing expansions of interim status sites. Should the Senate disagree with our view and concur with the substance of the House Bill, as reported out of the Committee on Energy and Commerce, we would respectfully request that the 10% rule not apply to facilities which have in good faith applied for such expansions under existing regulations. We would further suggest that the Administrator be given discretion to waive the 10% requirement at the request of a Governor and upon a showing of need for additional disposal capacity. This approach will preserve the equity of those applicants which planned their facilities in accordance with existing regulations and provide flexibility for responsible state and federal officials to do what is necessary to prevent real disposal crises.

CONCLUSION

Maryland has acted responsibly in addressing its lack of landfill disposal capacity problem. A "needs" study, a site selection study, and the actual proposed expansion of an existing landfill by a State agency represents a strong commitment to solving both the short-term and long-term state hazardous waste disposal problem.

Any substantive changes in the permit process should not further reduce State options in providing essential disposal capacity. It will lead to more frustration among States which cannot act decisively because of constraints in the federal regulatory process and may potentially intensify environmental and economic pressures as local plants are threatened with staggering disposal costs. We believe that the 10% limitation proposal, as currently set forth in H. R. 6307, could produce those unfortunate consequences.

Thank you.

Statement
# of the
NATIONAL ASSOCIATION OF ATTORNEYS GENERAL

Before the U.S. Senate

Subcommittee on Environmental Pollution

Presented by

Mary L. Lyndon

Assistant Attorney General

for the

State of New York

INTRODUCTION

NAAG urges the Senate to enact an amendment to RCRA, similar to Section 10 of the House Bill, H.R. 6307, which amends RCRA's savings clause. An amendment is needed to clarify the relationship between the common law and the RCRA regulatory scheme. NAAG will work with the Subcommittee staff to draft appropriate savings clause language.

The Supreme Court's 1981 decision in City of Milwaukee v. Illinois, 451 U.S. 304(1981), has been widely misinterpreted. It has been argued in some cases that City of Milwaukee holds that both state and federal common law of nuisance have been abolished by Congress. Neither of these conclusions results from the decision, which contains a carefully drawn and narrow holding.

Two basic facts about the way Congress wrote RCRA must be understood at the outset. First, RCRA establishes a limited scheme of controls which function within a broader scheme of law. It sets minimum standards for the handling of solid wastes and hazardous wastes and the standards are written into a dynamic context of federal, state and local laws. These include local zoning and sanitation ordinances, state health, environmental, commercial and labor codes, state common law and equity, and federal statutory and common law. RCRA was not written as a comprehensive health code. It does not supplant existing laws, but supplements them. Its savings clause is intended to assure that RCRA does not interfere with existing laws, which serve many different purposes.

Second, RCRA establishes a working partnership between the national and state governments. The states continue to bear the greatest part of the authority and responsibility for implementing and enforcing laws relating to public health, including disposal of wastes. RCRA specifically encourages states to make their own decisions on how to regulate wastes. 42 U.S.C. § 6929. One purpose of RCRA's savings clause is to continue in effect all existing state enforcement tools for the pursuit of RCRA's environmental goals.

RCRA's FUNCTIONS IN A COMMON LAW CONTEXT

The common law is the theoretical and functional foundation of this nation's legal system. In addition to safeguarding private rights, the state common law, particularly the public nuisance action, is an essential tool of state government. It is used to protect the public in certain situations -- when flexibility, speed or an individualized approach is called for. Nuisance law is a basic way in which states exercise the police power and function as _parens patriae_ to preserve the public health and welfare.

State and federal common law of nuisance are distinct in several ways. State nuisance law is part of the continuing body of the state common law of tort in most of the fifty states. It includes both the law of private and public nuisance - two separate traditions. Many states have also codified public nuisance law.

The _federal_ common law of nuisance is more specialized, as it pertains to interstate disputes and has been limited to public nuisance actions, in which a branch of state or local government has been the plaintiff. The federal common law of nuisance has been applied usually where one state, or a political subdivision of a state, has alleged that a public nuisance in its jurisdiction has been caused by a source in another state.*

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*The federal government has also used the federal common law of nuisance to protect navigable waterways. See, e.g., _United States_ v. _Ira Bushey & Sons, Inc._, 346 F. Supp. 145, 363 F. Supp. 110, (D. Vt. 1973), aff'd 487 F. 2d 1393 (2nd Cir. 1973), _cert_. _denied_ 417 U.S. 976 (1974); _United States_ v. _United States Steel Corporation_, 356 F. Supp. 556 (N.D. Ill. 1973).

The nuisance action is part of the mainstream of the common law. Whether in state or federal courts, the same basic substantive law has been applied in recent decades. The Restatement of Torts 2d, § 821-B, defines a public nuisance:

> (1) A public nuisance is an unreasonable interference with a right common to the general public.
>
> (2) Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:
>
> (a) Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
>
> (b) whether the conduct is proscribed by a statute, ordinance or administrative regulation, or
>
> (c) whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.*

As Professor William L. Prosser explains, nuisance is actually a field of tort liability, rather than a type of conduct. A nuisance is an effect caused by negligent or other tortious behavior. Prosser, The Law of Torts, 4th Edition, pp. 573-75. Thus, before a court will declare

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*Numerous states, including New York, have adopted the Restatement's formulation. See, e.g., Copart Industries v. Consolidated Edison, 41 N Y 2d 465 (1977).

that a nuisance exists, it will conduct the same fact finding and legal proceedings as apply in tort cases generally.

Law concerning permits and licenses has developed alongside the law of nuisance. Traditionally permits have been granted not as general defenses to all claims arising from an activity, but as limited rights to engage in specific activities. See Phalen v. Virginia, 49 U.S. (8 How.) 163, 167-68 (1850). Any exemption afforded by a license extends only so far as the express or necessarily implied grant contained in the license. For a license to be pleaded as a defense, it must be apparent that the legislature contemplated the doing of the very act which occasions the injury which is claimed to be a nuisance. Richards v. Washington Terminal Co., 233 U.S. 546, 552 (1914). Permits and licenses are by their nature restricted by a rule of reason: "Wherever possible the authority given will be construed to permit only reasonable conduct of the enterprise in a reasonable manner, with proper care and due regard for the interests of others... ." Prosser, op. cit. at pp. 606-7 and cases cited therein.

In the RCRA statutory context the common law rule of reason operates as a safety valve. Making a RCRA permit a complete defense to common law claims would invest EPA with a responsibility and an authority it is not equipped to handle. It would, in effect, authoriz EPA to license negligence, regardless of the unforeseen costs which may occur.

THE COMMON LAW AND STATUTES SUPPLEMENT EACH OTHER

Most state constitutions preserve the common law and establish the jurisdiction of the state judiciary over common law claims. A 1975 survey of state case law indicated that numerous states' courts had held that injunctive relief from pollution which is found to be a nuisance is available in spite of an active administrative agency operating in the subject area.* The cases hold that the state legislatures intended to establish administrative environmental controls as a supplement to existing law.

The underlying question in a nuisance case is whether an unreasonable interference with public rights is taking place in a particular situation. Administrative agencies operate by general rules and averaged standards. They therefore tend not to deal with individual situations. Whether a nuisance exists in a particular case is a question of the common law, which administrative agencies are not competent to answer.

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*The states included in that survey were California, Delaware, Wisconsin, Pennsylvania, Georgia, New York, Florida and Illinois. See People v. Los Angeles (1958) 160 Cal. App. 2d 494, 325 P 2d 639; Pottock v. Continental Can Co. (1965) 42 Del. Ch. 296, 210 A 2d 295; State v. Dairyland Power Cooperative (1971) 52 Wis. 2d 45, 187 NW 2d 878; Brookhaven v. American Rendering, Inc. (1969) 484 Pa 290, 256 A 2d 626; J.D. Jewell, Inc. v. Hancock (1970) 226 Ga. 480, 175 SE 2d 847; State v. Huntington (1971) 67 Misc. 2d 981; State ex rel. Shevin v. Tampa Electric Co. (1974, Fla. App.) 291 So 2d 15. Also see Village of Wilsonville v. SCA Services, Inc., (1981) 86 Ill. 2d 1, 426 NE 2d 824.

Courts will not issue an injunction, an equitable remedy, where there is a remedy at law. However, a legal remedy is not always available. There will always be situations which cannot be foreseen when a statute or regulation is written. Sometimes even a thoroughly prepared permit will fail to account for a crucial fact. Thus, there are compelling practical needs which are met by the common law.

In the usual attorney general's nuisance case, an individual polluter is negligently causing a local public health problem and the statutory or regulatory scheme does not cover the situation. It may fail to address the problem, because the statute does not address it or because the agency implementing the statute has set enforcement priorities which do not reach this case. Administrative agencies are overloaded with demands and they delay addressing problems which do not seriously affect the majority of citizens, even though they may very critically damage certain localities. For example, EPA has estimated that it will take it twelve years to issue RCRA permits. In the meantime, its RCRA regulations have no substantive effect on nonpermitted handlers of wastes.

Another kind of case develops where permits for an activity are granted, but through the discharger's negligence and because of inadequacies in the agency's prior review - perhaps an unavoidable inadequacy - a public health problem is caused by permitted activity. While agencies attempt to protect the public, they do not always succeed. Thus, the common law allows for cases in which a permit is not a defense to negligent conduct which is causing injuries.

For example, it is the law of Illinois that a public nuisance may be found to exist and an abatement order issued by a court, even though permits have been granted. In Village of Wilsonville v. SCA Services, Inc. (1981) 86 Il. 2d 1, 426 NE 2d 824, the Illinois Supreme Court upheld an injunction in spite of the fact that the state environmental agency had granted over 100 permits to SCA to develop a site for a hazardous waste landfill. When the villagers became aware of the fact that the permits had been granted, they pointed out that the landfill site was located above an abandoned mine shaft and argued that this would cause shifting of the containment area and consequent discharge of chemicals into the groundwater. The agency had not considered this in granting the permits. Later, the plaintiffs were proven to be right: the site began to leak and was closed down. Cases similar to Wilsonville occur occasionally and can only be adequately dealt with by the common law approach.

Even though City of Milwaukee deals only with federal common law, there is dicta in it which, taken out of context, has been used to argue that savings clause language similar to RCRA's preempts state statutory and common law and the federal common law of nuisance. The Supreme Court's opinion relied heavily on its interpretation of Congressional intent in the Clean Water Act's savings clause (§ 505[a]). The Court read the language, "Nothing in this section shall restrict any rights which any person...may have under any statute or common law..." to mean only that section, and not the Act itself. However that section contains the savings clause for the Act; Congress apparently meant "Nothing in this Act..." was to restrict existing rights. H.R. 6307 changes RCRA's savings clause, by substituting the word 'Act' for the word 'section', to prevent confusion on this point.*

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*In any case, Congress may preempt state law only where it is necessary to avoid conflicts between state and federal law. City of Philadelphia v. New Jersey, 437 U.S. 617, 621, n. 4 (1978). There is no conflict between RCRA and the states' use of common law. There is therefore no basis for preemption. Indeed, the state's common law enforcement powers are so basic to their governmental function that a move to preempt them would test the limits of the Tenth Amendment restrictions on federal authority. See National League of Cities v. Usery, 426 U.S. 833 (1976).

The City of Milwaukee decision dealt only with the federal common law of public nuisance in the water pollution context. The Court's opinion expressly stated that it was not dealing with preemption of state common law. Indeed, it read the Water Pollution Control Act savings clause to specifically preserve state common law rights. 451 U.S. at 316.

CITY OF MILWAUKEE IS A LIMITED DECISION

To preserve the balance between statutory and common law, the Supreme Court has made only limited decisions in this area. The City of Milwaukee decision rests on the Court's reading of Congress' intent regarding the proper relationship between the separate branches of the federal government. The Court addressed the question of whether the statute allows a federal judge to impose restrictions additional to those in a federal water pollution permit. It read into the Water Pollution Control Act a Congressional intention that the permit should speak for the federal government where the permit addresses the same pollution which the court is asked to remedy.

> in contrast, the states and the EPA are not required to control effluents from every source, but only from those sources which are found by the states and the agency to threaten national ambient air quality standards. 42 U.S.C. § 7410(a)(2)(d). In light of those and other differences, we leave for a more appropriate case the question of whether all federal common law nuisance actions involving the emission of chemical pollutants into the air are precluded by the statutory scheme set forth in the Clean Air Act. New England Legal Foundation v. Costle, 666 F. 2d 30, 32, n. 2 (2d Cir. 1981).

Like the Clean Air Act and unlike the Water Pollution Control Act, RCRA sets up a scheme which addresses some sources of pollution and not others. In addition, RCRA has no provisions for resolution of interstate disputes, so another of the factors present in City of Milwaukee would not be present in a RCRA-related case. The federal common law of nuisance will still have a function to play in interstate disputes over solid and hazardous wastes.

It is significant that EPA not only did not disapprove the common law remedy in City of Milwaukee, but expressed active support of it, through the participation of the United States as amicus in support of Illinois. EPA itself has pressed federal common law nuisance claims in the past.

United States v. Outboard Marine Corp., 12 ERC 1348 (N.D. Ill. 1978); United States v. Hooker Chemicals & Plastics Corp., et al., Civil Actions Nos. 79-987, 79-988, 79-989 and 79-990 (W.D.N.Y.).

Before this Subcommittee, an EPA representative has stated the present Administration's position to be that the federal common law of nuisance will apply, except where EPA has granted a RCRA permit. The EPA representative did not offer any explanation as to why EPA now takes this position. RCRA encourages states to seek stricter environmental solutions. 42 U.S. § 6929. If, on request of a state, a federal court applies a stricter remedy in an interstate pollution case, how are EPA's or RCRA's goals hindered?

In addition, one legal issue which is important to the states has not been addressed, either by EPA or by the majority of the Supreme Court in the second City of Milwaukee decision. That issue is the states' right to a federal forum to settle interstate disputes. Where a statute does not provide a remedy for a state, the Supreme Court held in Illinois v. Milwaukee(I) that nuisance provides federal question jurisdiction in the district courts, pursuant to 28 U.S.C. § 1331. Illinois v. Milwaukee, 401 U.S. 91, 98 (1971). Since states are not citizens for purposes of diversity jurisdiction,* a broad repeal of the federal common law of nuisance removes the only other basis for federal jurisdiction and thereby raises a serious constitutional federalism question.

In a case cited with favor by the Supreme Court in its first Illinois v. Milwaukee decision, Missouri v. Illinois, 200 U.S. 496 (1906), the Court held that a federal common law of nuisance must exist to redress an affront to a state's physical integrity, such as water pollution, which is caused by a source in a neighboring state. Writing for the Court, Justice Holmes addressed this basic question of federalism. He reasoned that a sovereign which was not a member of the Union might go to war with a neighbor to end such a nuisance. The states, in forming the Union, relinquished this prerogative in exchange for a federal judicial forum. 200 U.S. at 520-21 (1905). In a later air pollution case, Justice Holmes described a suit by state for an injury to it as brought in its capacity as quasi-sovereign:

> ...In that capacity the State has an interest independent of and behind the titles of its citizens in all the earth and air within its domain. It has the

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*Ohio v. Wyandotte Chemical Corporation, 401 U.S. 493, 498, n. 3(1971); Postal Telegraph Cable Co. v. Alabama, 155 U.S. 482, 487 (1894).

> last word as to whether its mountains shall be stripped of its forests and its inhabitants shall breathe pure air...
>
> ...When the States by their union made the forcible abatement of outside nuisances impossible to each, they did not thereby agree to submit to whatever might be done. They did not renounce the possibility of making reasonable demands on the ground of their still remaining quasi-sovereign interests; and the alternative to force is a suit in this court.
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> Missouri v. Illinois, 180 U.S. 208, 241. Georgia v. Tennessee Copper Co., 206 U.S. 230, 237 (1907).

Accord, Kansas v. Colorado, 206 U.S. 46, 98 (1907); New York v. New Jersey, 256 U.S. 296, 301-2 (1921); Nebraska v. Wyoming, 325, U.S. 589 (1945); State of Texas v. Pankey, 441 F. 2d 236 (10th Cir. 1971). The Court has recognized that relegation to the neighboring state's court is not adequate:

> The object of vesting in the courts of the United States jurisdiction of suits by one State against the citizens of another was to enable such controversies to be determined by a national tribunal, and thereby to avoid the partiality, or suspicion of partiality, which might exist if the plaintiff state were compelled to resort to the courts of the state of which the defendants were citizens.
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> Wisconsin v. Pelican Ins. Co., 127 U.S. 265, 289 (1888).

The states should continue to have available to them a federal forum for interstate disputes.

The federal common law is a necessary and basic element of our system of environmental law, as it is in other areas of federal interest.* The Supreme Court in City of Milwaukee read the Water Pollution Control Act to implicitly repeal the federal common law of nuisance. The Court did this in spite of the principle of law that repeals by implication are not favored.**

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*E.g., Common law continues to play a vital role in the area of pension rights, and in federal maritime law. See, Moragne v. States Marine Lines, 398 U.S. 375, 392 (1970) ("... It has always been the duty of the common-law court to perceive the impact of major legislative innovations and to intervene the new legislative policies with the inherited body of common-law principles -- many of them deriving from earlier legislative exertions.")

**As the D.C. Circuit Court of Appeals has phrased it, "... [a] statute will not be construed as taking away a common law right existing at the date of its enactment, unless that result is imperatively required; that is to say, unless it found that the pre-existing right is so repugnant to the statute that the survival of such right would in effect deprive the subsequent statute of its efficacy... ." Sierra Pacific Power Co. v. Federal Power Commission, 223 F. 2d 605, 607 (D.C. Cir. 1955) aff'd 350 U.S. 348 (1956). And see, Texas & Pacific Railway v. Abilene Cotton Oil Co., 204 U.S. 426, 437 (1907); Federal Power Commission v. Niagara Mohawk Power Corp., 347 U.S. 239, 252-53 (1954).

NAAG believes that the Court's reading misconstrues Congress' intent, particularly in light of the legislative history of the Water Act. (Legislative History of the Water Pollution Control Act Amendments of 1972, prepared by the Environmental Policy Division of the Congressional Research Service of the Library of Congress, January 1973, Vol. 2, p. 1499.) NAAG has urged Congress to amend the Act to clarify these points, as they apply to common law water pollution cases. (See Report of the National Association of Attorneys General to the United States Congress on Reauthorization of the Clean Water Act, March, 1982.) We urge the Senate to join the House in amending RCRA's savings clause to prevent further confusion and needless litigation on this point.

CONCURRENT APPLICATION OF COMMON LAW AND STATUTES DOES NOT UNFAIRLY BURDEN INDUSTRY

The averaged economic costs of pollution controls are usually considered in the development of regulations. However, the actual financial burdens for individual companies vary widely in amount, nature and duration. All polluters should not be shielded from common law obligations by the financial weakness of a few.

In any case, an individual defendant's financial ability to abate a nuisance is a proper issue for a court in a tort action. Professor Prosser discusses the kinds of balancing judgments which are appropriate in a nuisance case, particularly in fashioning a remedy. "... There is no liability for nuisance unless the defendant's conduct is unreasonable under the circumstances." Prosser, op. cit., at 598, 602. Economic constraints, the utility of the polluting activity to the community, and the adequacy of existing controls relative to the "state-of-the-art" are all important factors in a nuisance decision.*

The history of the federal common law of nuisance shows that the courts have not been quick to contradict the administrative agencies charged with implementing federal statutes. E.g., New England Legal Foundation v. Costle, 475 F. Supp. 425 (D. Conn. 1979). A catalogue of the cases of the 1970's would not reveal judicial disregard for the expertise of the agencies. On the contrary, courts are accustomed to deferring to their primary jurisdiction.

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*Also, see the analogues toxic drug litigation for treatment of the "state-of-knowledge" or foreseeability issue, e.g., Basko v. Sterling Drug, Inc., 416 F. 2d 417 (2d Cir. 1969); O'Hare v. Merck & Co., 381 F. 2d 286 (8th Cir. 1967).

The context within which Congress wrote RCRA will remain variable. The RCRA permit system itself is not static. Congress created a dynamic scheme which will require polluters to upgrade controls as technology improves. EPA is required by RCRA to foster evolution of new technical standards. See RCRA, Subchapter VIII.

In addition, there are numerous other sources of potential change in pollution control requirements. For example, common law tort actions, such as negligence and wrongful death, may lead to court orders that pollution controls be upgraded. OSHA regulations may be instituted or changed and have an impact on pollution discharges. State laws and local ordinances may also be changed to require stricter controls. Standards may be overturned in a mandamus action on the ground that essential health considerations, perhaps newly discovered, must be taken into account in setting such standards. The future adequacy of pollution control devices may be affected by numerous sources of law, none of which are abolished by RCRA.

A superficial view of pollution problems and the RCRA regulatory scheme may lead to a first impression that the federal regulatory tools are or must be sufficient. However, this view is facile and fails to account for the complexity of real life situations. As a practical matter, RCRA cannot establish a uniform, final or exclusive scheme by which pollution dischargers can plan their activities for all time. The regulatory scheme can only establish uniform minimum standards and encourage stricter variations; it does not provide theoretical "uniformity for uniformity's sake." See, e.g., Natural Resources Defense Council v. Train, 510 F. 2d 692, 711 (D.C. Cir. 1975).

Arguments that common law remedies interfere with the "efficient operation of the regulatory scheme" and "upset the reasonable expectations" of enterprises which discharge pollutants obscure the issue. They are arguments in favor of licensing negligence, regardless of the human costs. Congress must decisively reject the proposition that federal environmental laws will necessarily tolerate unforeseen harm to humans. It would truly be an Orwellian state of affairs if the common law were to be abandoned in favor of total dependence on the central bureaucracy.

Through RCRA Congress has instituted a national cleanup campaign. It has left existing laws intact. RCRA's savings clause should make this clear.

STATEMENT
OF THE
AMERICAN INSURANCE ASSOCIATION
PRESENTED TO THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
CONCERNING
MANDATORY SAFETY INSPECTIONS
FOR
HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES
JUNE 24, 1982

The American Insurance Association (AIA) is a trade association which represents 168 property and casualty insurers. The member companies of the AIA will be asked to provide Environmental Impairment Liability (EIL) insurance coverage in response to the financial responsibility requirements mandated by the Resource Conservation and Recovery Act (RCRA).

Sudden and accidental insurance coverage for discharges of toxic substances from hazardous waste facilities is available today, and a market for non-sudden insurance coverage for gradual pollution incidents is developing. The market should continue to develop as the requirement for non-sudden coverage is phased-in in compliance with RCRA.

The AIA supports the concept of a regulatory program for the RCRA permitting process which includes mandatory periodic inspections of hazardous waste treatment, storage and disposal facilities to determine their compliance with applicable safety regulations. We believe these inspections should be performed by an appropriate federal or state official or a qualified private contractor operating on behalf of the appropriate agency. If an insurer wishes to perform such inspections, it should do so as a government contractor and perform such activity on behalf of the Environmental Protection Agency. The determination of compliance with, and the necessary enforcement of, government safety standards are the functions of the government imposing those standards.

In addition, an independent advisory committee should be established under the Environmental Protection Agency to advise on facility regulations, standards for certification inspections, and qualifications as may be needed for inspectors of the Agency. Committee membership should be comprised of environmentalists, insurers, facility owner/operators and EPA officials. We also suggest that the Environmental Protection Agency look to the voluntary standards-making bodies for assistance in the development of standards. It should be stressed that various existing organizations have already begun to form working groups to establish standards for waste disposal sites.

The AIA would oppose any mandatory RCRA inspection proposal which would require or prevent the insurer at risk from performing the mandatory inspection. Insurers should be free to conduct their own underwriting inspections and compliance audits and should not be required to conduct safety inspections on behalf of the EPA. It is essential that insurers which accept a policyholder's environmental impairment liability exposure not be forced, through law or regulation, to perform an inspection for EPA at the policyholder's site. Each individual insurer should be given the opportunity to decide whether it wishes to perform such inspections.

If at all possible, the Association would prefer that a process of mandatory safety inspections be initiated through the regulatory process rather than the legislative process. We believe that EPA has ample authority through Section 3007 of RCRA to implement an inspection program.

The AIA believes that mandatory inspections, both in the permitting process and during the operational phase of the waste disposal site, will enhance public safety and reduce liability exposure to the owner/operator. A segment of the insurance industry is capable of providing expertise in the area of safety inspection and is interested in providing this service.

Respectfully submitted,

J. L. K.

James L. Kimble
Senior Counsel

STATEMENT OF DONALD K. WILSON, JUNE 24, 1982

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

U.S. SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

Thank you Mr. Chairman and Members of the Committee for inviting me to testify today. My name is Donald K. Wilson. I am Vice President of the Hartford Steam Boiler Inspection and Insurance Company. I am pleased to address today a matter of serious public importance -- the safe operation of facilities that treat, store or dispose of hazardous wastes (commonly referred to as "TSD facilities") -- and to propose a practical means of monitoring the safety of these facilities.

The Need for Inspections

Today, there are over 10,000 facilities classified under Section 3005 of the Resource Conservation and Recovery Act ("RCRA") as TSD facilities. These facilities regularly handle in one form or another, substances that can pollute, contaminate, even kill -- if proper and continuous safety precautions are not taken. Yet, under RCRA, no inspection of these facilities is required on a regular basis. Although RCRA has, since 1976, authorized State and federal personnel to inspect any facility where hazardous wastes are handled, in fact few inspections are being conducted. The American Insurance Association recognized this problem in November 1981 when it conditioned its approval of financial responsibility requirements under RCRA on, among other things, regulatory bodies' full exercise of their authority, and the performance of "mandatory inspections in accordance with appropriate qualification and performance standards . . . by the company at risk, by an independent inspector, or by a suitable government agency."

Further, RCRA provides no minimum standard to govern the quality of inspections when they do take place. Indeed, a survey of inspection programs in 20 states, conducted by Radian Corporation, a subsidiary of the Hartford Steam Boiler Inspection and Insurance Company (a copy of the results is attached to my Statement), shows a wide range in the qualifications of inspectors and the time spent on inspections. For example, California's 15-18 inspectors each perform two inspections per month (only twenty-five percent of which are RCRA inspections) while Arkansas' three inspectors each perform eleven inspections each month. This strongly suggests that there is also a wide range in the quality of inspections and, quite possibly, in the safety of the facilities inspected. Moreover, the great majority of inspections carried out by State inspectors are limited in scope. In most cases, the inspection does not include sampling and analysis, unless there is otherwise reason to believe that there is a leak or other problem at the facility.

Finally, we cannot expect a mandatory inspection program to evolve from the recently published financial responsibility regulations. These regulations provide that the owner or operator of a hazardous waste facility must obtain insurance (or demonstrate the existence of financial assets) sufficient to provide some compensation to those injured by sudden accidents and gradual releases from the facility. Although insurance companies have a strong incentive to prevent releases from occurring at insured facilities that may give rise to claims, in the absence of mandatory inspections, the market will prevent an insurer that wants to perform inspections from doing so. Competitive pressure from companies that are willing to insure facilities without regular inspections will prevent other companies from including the cost of inspections in their premiums.

The present situation in the hazardous waste insurance market will illustrate the truth of this statement. A number of companies offer environmental impairment liability coverage with little or no risk assessment through facility inspection. This had prevented other companies from doing thorough risk assessments on all facilities they insure. Even among those that do perform initial inspections, no company in the current market can afford to conduct regular follow-up inspections.

Even if the market might eventually favor companies that inspect facilities regularly because their expenses for claims would be lower, this could take many years. In other segments of industry, such as fire insurance, it has taken over a century for the market to develop a comprehensive inspection code. Rather than repeat this learning process, we should benefit from experience in other areas by requiring regular inspections. In addition, the market is unlikely to generate a uniform inspection standard. Without uniformity, there is no assurance that each inspection will conform to a minimum standard.

An authorized but non-mandatory inspection provision at best offers minimal incentive for owners and operators of hazardous waste facilities to comply completely with safety standards, to spend the time and money to correct violations that may never be caught. A mandatory program of periodic inspection provides this incentive to self-correction and prevention of injury and loss due to environmental impairment.

At this point, the public has no assurance that hazardous waste facilities are truly and continuously operating safely, or that health and the environment are protected. It is no wonder that this committee recently heard a great deal of testimony that public opposition to new hazardous waste sites is a major stumbling block to hazardous waste management. The public lacks confidence in the ability of federal and State authorities to assure the safe operation of these facilities, old or new. Until a measure of prevention is added to the hazardous waste regulatory system, public opposition is likely to continue, even to grow. Assured compensation for injuries, provided in the recently issued financial responsibility regulations, is cold comfort if the lack of a means to detect dangerous conditions at facilities virtually guarantees that compensation will become necessary in many instances.

Proposed - A Practical Measure of Prevention

Since the cost of hiring enough State and federal officials to conduct regular mandatory inspection of all hazardous waste facilities would be prohibitive and present resources of the disposal of the States and EPA do not appear sufficient for the task, we are suggesting an alternative solution. To create an efficient, practical mandatory inspection program, my company is proposing that we learn from the past, from an industry that drastically reduced its risks through a program authorizing certified private inspectors to conduct mandatory inspections. We believe our considerable experience in this area is relevant and helpful.

As its name suggests, the Hartford Steam Boiler Inspection and Insurance Company began as a company that insured the safety of boilers. In the nineteenth century, boiler explosions were an all too common occurrence and boiler safety became an important public concern. During the five-year period, 1898-1903, some 1,200 people were killed in 1,600 boiler explosions. Subsequently, States and industry groups developed codes to govern the safe construction and operation of boilers. Today, boiler inspection is largely carried out under the Model Uniform Boiler and Pressure Vessel Safety Law (I have attached a copy to my Statement), which has been adopted in forty-four states and the District of Columbia. Boilers may be inspected by government employees, employees of companies insuring the boilers, or, in some States, the operator of the boiler. In all cases, the inspector's competence must be certified by the State, often using tests developed by the National Board of Boiler and Pressure Vessel Inspectors.

This inspection scheme has proven extremely effective in reducing boiler explosions and resulting injuries. From 1900-1980, the annual number of boiler explosions in the United States fell from about 400 to one or two, largely as a result of regular inspections by certified independent inspectors.

We believe this experience can be adapted and transferred to the hazardous waste field. An innovative, flexible approach to the inspection of hazardous waste facilities can be developed using the resources, expertise, and experience of the private sector. We propose the implementation of a three-part program for the inspection of TSD facilities -- mandatory regular inspections in accordance with national standards; conducted by independent inspectors whose integrity and competence has been certified; where the standards for inspection and the qualifications of inspectors are developed by an EPA-created Board composed of representatives from all interested parties.

The benefits of regular inspections by qualified independent inspectors include increased safety of the hazardous waste system, prevention of sudden accidents and gradual pollution through early detection of problems, and enhanced public perception of the regulatory framework.

To alleviate resource constraints at the State and federal levels, we propose that, in addition to government inspectors, certified employees or representatives of insurance companies and certified independent contractors be authorized to conduct inspections on behalf of the appropriate federal or State agency.

In each case, the cost of inspection would be borne by the facility operator.

By authorizing insurance company personnel as inspectors, as in the successful boiler scheme, we take advantage of the congruence of interest between the public and the insurer of a facility. Like the public, the insurer does not want accidents to happen. The insurer has a vital interest in the present and future integrity of the whole hazardous waste system. He is not in business for the moment -- covering only one risk -- but seeks to secure a position in the market over the long term.

For a number of reasons, the insurer cannot walk away from a site where problems arise. Foremost among these reasons are the terms of the standard environmental impairment liability policy, which provides for a period of coverage for losses discovered after the cessation of the policy. Nor can the insurer afford to ignore violations uncovered in his inspections. Because of policy exclusions for violations of applicable regulatory standards, it is in the insurer's finanical self-interest to report these violations. These concerns help to assure that insurance company personnel will conduct careful, thorough inspections upon which the public and regulatory agencies (which would receive their reports) can rely.

The certification of inspectors by a national Hazardous Waste Facility Inspection Board, created within EPA, would provide further assurance of quality inspection. Such a Board could include all interested groups among its members -- the public, environmental protection groups, hazardous waste facility operators, national standard-setting bodies, State and federal regulators, and the insurance industry. The Board would establish minimum national standards for the qualifications of inspectors and the conduct of inspections. Moreover, the Board would be ideally suited to tailor the frequency and type of inspection required to the class of facility involved.*/

A national Board is necessary to assure uniformity of inspections nationwide. It is equally important, however, that States be fully involved in the inspection process. State hazardous waste regulators should be heavily represented on the national Board. Also, States should be permitted and encouraged to take over this inspection program as long as their substitute programs are at least as stringent as the federal program.

It is important to note that this proposal does not involve self-inspection or certification. The private inspector must be independent of the facility operator. Finally, it may be appropriate at this time to briefly outline some further controls that could be placed on this process to assure the integrity of data and reports. In my company, we have separated entirely the insurance sales force from the inspection force. They have separate lines of command. This ensures that no undue pressure is placed upon the inspector. The availability of criminal and other penalties (including suspension or revocation of an inspector's certificate) for false reporting to the government will also discourage that practice. Finally, this proposal does not in any way limit the current authority of State and EPA officials to inspect hazardous waste sites. This residual authority could serve as a further check, to assure that inspections are conducted properly.

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*/ The attached cost study, prepared by the Radian Corporation, presents three different assumptions of inspection frequency and rigor. These are only assumptions, and are not meant to prejudge the appropriate inspection protocol for each type of facility.

Such a hazardous waste inspection program would be flexible. States could impose higher standards of protection to satisfy local concerns. A consensus Board would be more capable than a regulatory body of responding to and applying technological innovation in the operation of hazardous waste facilities. Finally, the facility owner or operator could choose inspection by a government or a private inspector. In either case, he would pay for the inspection -- through a fee or insurance premium. Experience under the State boiler inspection program suggests that most operators elect private inspection, usually by insurance inspectors. Such inspections tend to be more efficient and cost-effective because inspectors are subject to the discipline of the marketplace.

In short, a mandatory, periodic inspection program carried out by independent inspectors can, at very low cost to the government, substantially increase the safety of hazardous waste facilities and reassure the now skeptical public that the hazardous waste regulatory system is functioning in the interest of safety.

This innovative program combines the experience, talent, and resources of the States, the federal government and the private sector.

We believe that our proposal is practical and timely. The issue of safety at hazardous waste facilities will not wait. The public looks to us for answers. We have an excellent opportunity to give them a very good one.

AMERICAN INSURANCE ASSOCIATION -- BOARD RESOLUTION, NOVEMBER 1981

If any law or regulation authorizes the establishment of financial responsibility requirements for hazardous waste storage, treatment and disposal facilities, such requirements should be opposed if they do not meet the following criteria:

(1) that the regulatory authority must fully exercise its authority and responsibility as a safety regulator;

(2) that insurance shall not be the sole method of demonstrating financial responsibility; self-insurance and alternate methods of financial guarantee shall be allowed;

(3) that claims-made insurance policy forms shall be acceptable as evidence of financial responsibility;

(4) that only facilities which the regulatory authority administratively determines otherwise qualify for permits be required to furnish evidence of financial responsibility; or that financial responsibility requirements be effective only upon self-certification by facility owners of facility compliance with all other acceptable facility standards;

(5) that insurers be permitted to include in their contracts provisions voiding coverage for losses resulting from facility owners' intentional failure to comply with applicable facility standards or permit requirements;

(6) that insurers furnishing evidence of financial responsibility for facility owners be free to invoke any defense to liability that would be available to the owners in actions against those owners, and any defense that would be available to insurers in actions against them by those owners; and

(7) that insurance contracts written through or pursuant to any residual market mechanism or pursuant to any law permitting direct actions against insurers be unacceptable as evidence of financial responsibility.

(8) that mandatory inspections in accordance with appropriate qualification and performance standards should be performed by the company at risk, by an independent inspector, or by a suitable government agency.

HAZARDOUS WASTE INSPECTOR PROGRAMS AND QUALIFICATIONS

- The size of hazardous waste inspector staffs across the country ranges from 1 person (Oregon) to 80 people (New York). The number of inspections per month that an inspector performs on the average ranges from 1 (California) to 16 (Kentucky).

- Hazardous waste inspections are not usually the only responsibility of hazardous waste inspectors. Hazardous waste inspectors often have other duties, which can usually be categorized as one of two types: 1) hazardous waste program support services such as technical assistance, permitting, spill response and clean-up; or 2) multimedia inspection services such as non-hazardous waste inspections and/or air and water inspections.

- Inspection teams in most states consist of one person. Two or more person-teams are used in some states for large or complex facilities. Two or more-person inspection teams do not always include inspectors with different qualifications or specialities. Rather, the other persons are used for safety reasons or for equipment handling.

- Inspector qualifications are not specified in the statutes or regulations in any of the states interviewed. Inspector qualifications are usually specified in the form of job descriptions for the inspector position. In some states, no minimum requirements are specified (i.e., North Dakota, Ohio).

- Most states' hazardous waste inspector qualifications include a minimum educational requirement but no experience. Many states require a college degree in a science-related area. In several states, the hazardous waste inspector position is not an entry level position. To be a hazardous waste inspector, a candidate must get experience in some other part of the agency and then be transferred. Michigan has the broadest set of requirements and the most elaborate certification process.

- Training courses are required in most states. In states where training is not required, outside training courses (by EPA and consultants) are usually attended, nevertheless. Most states provide most of their training through on-the-job techniques. Few states had programmatic in-house training programs although many give informal in-house training programs occasionally when the need arises, to supplement on-the-job training. Most states send representatives to attend EPA-sponsored training courses and sometimes to other agency-sponsored or consultant-sponsored training courses.

There are no guidelines set at the national level for federal hazardous waste inspectors. Hazardous waste inspector qualifications and inspector programs are specified at the EPA regional level. In Region V (Chicago), hazardous waste inspectors employed directly by EPA must have a college degree in a scientific area at a minimum. However, the Agency contracts out for many of the inspectors it needs to perform inspections in non-delegated RCRA states. In these cases, EPA often contracts with the state to use the state's inspectors, or with a third party. In Region V, EPA does not set qualifications for the state inspectors it uses. (The Region does look at the qualifications of third-party inspectors.) Region V states that it addresses inspector qualifications with states in the State Implementation Plan (SIP). In the SIP, the states specify how many inspections EPA will do in the states or how many inspections EPA will accompany the states in doing. Training arrangements between EPA and the state are often also addressed in the SIP. For its own employees, Region V conducts training through training courses and on-the-job techniques.

HAZARDOUS WASTE INSPECTOR PROGRAMS*

State	Name of Agency	No. of Inspectors	Duties of Inspectors	No. of Inspections Per Month Per Inspector	No. of Persons on An Inspection Team	Comments
Alabama	Board of Public Health	5	Hazardous waste inspections	10	2-Person-team for major facility inspections; 1-person-team for all other inspections; often conduct inspections with 2-person-team from EPA	None.
Arkansas	Department of Pollution Control & Ecology	3	Hazardous waste inspections; spill response; technical assistance for RCRA	11	1-Person-team usually; occasionally 4-person-team will inspect a major facility	No turnover in more than 2 years.
California	Department of Health Services	15-18	RCRA inspections 25%; information requests 30%; complaints, cleanup 45%; permitting	2	1-Person-team (80% of the time), sometimes 2-Person-teams are used.	No turnovers yet. Program is new.
Delaware	Department of Natural Resources & Environmental Conservation	1	Hazardous waste inspections	3 initial inspections; 3 follow-up inspections	1 person	With 150 industries with hazardous waste, Solid Waste Management Branch may be understaffed.
Georgia	Department of Natural Resources	12	Hazardous waste inspections & compliance; non-hazardous waste inspections & compliance	10	1 Person	Inspectors work in the field 2 days per week. Other 3 days are spent doing follow-up paperwork. Moderate turnover reported.
Illinois	Environmental Protection Agency	About 25	Hazardous & solid wastes site inspections; technical & regulatory information	1 to 3	Usually 1 person; second specialist goes along when needed	Inspection is under contract to USEPA. Illinois does not have RCRA authority.
Michigan	Department of Natural Resources	60	Water quality inspections; air quality inspections; hazardous waste inspections; permit review	Not identified	Often 2 or more persons (team members come from different divisions, with one division contributing the lead team member)	Michigan has developed a certification program in conjunction with EPA. Michigan developed their program with EPA because state did not have authority in its own statutes to specify inspectors' qualifications. Consequently, the state asked EPA to certify its (the states) inspectors for it. A certification program was developed by the state and EPA. To combat any turnover problems, Michigan trains as many people as possible.
Mississippi	Department of Natural Resources	12	Inspection assignments made by industry type; wood products; pesticides, oil refining	Not identified	Not identified	Program is very new. Most of the effort at present time is spent on training.

*Table compiled by Policy Analysis Department, Radian Corporation, Austin, Texas. Material is up to date through April 12, 1982.

(Continued)

HAZARDOUS WASTE INSPECTOR PROGRAMS* (Continued)

State	Name of Agency	No. of Inspectors	Duties of Inspectors	No. of Inspections Per Month Per Inspector	No. of Persons on An Inspection Team	Comments
Montana	Department of Health & Environmental Services	3	1 inspector does hazardous waste inspections, permitting, response, etc.; other 2 do inspections for both solid & hazardous waste	3-4	Normally more than 1 person on the inspection team, depending on the size of the facility	Public Service Commission also inspects hazardous waste transporters as part of highway inspection program. No formal agreements between DHES and PSC.
New Jersey	Department of Environmental Protection	5 at any time	Hazardous waste inspections	Not identified	1 Person	Inspectors rotate between hazardous waste inspection programs and other program areas every 1/4 to 1/2 year. There are 15 persons qualified to do inspections but only enough facilities to occupy 5 inspectors.
New York	Department of Environmental Conservation	80	40 to 60 of these carry out hazardous waste inspections on daily basis; others perform them periodically	Not identified	1 Person	Turnover is low. Using inspections certified by EPA. New York is just about to receive Phase I RCRA authorization.
North Carolina	Department of Human Resources	16	10 do hazardous waste inspections full time; other 6 do some hazardous waste inspections, technical assistance, permit review, and issue violation notices	6-8	1 Person; 2 or more-person-teams are used for complex or problem facilities--in these cases, team typically consists of field inspector (with a science-related background) and an engineer	State began on-the-job hazardous waste inspector training program in 1977.
North Dakota	Department of Health	3	Hazardous waste inspections, solid waste inspections; permit review	3	4 Persons: 2 field inspectors, 1 inspector from EPA & 1 from North Dakota Central Office	North Dakota has Phase I interim authorization for disposal facilities only. Refineries are the worst type of hazardous waste facility identified in the state.
Ohio	Environmental Protection Agency	25	Hazardous waste inspections; cleanup of abandoned sites	3-4	2 Person usually; sometimes as many as 3 inspectors, especially if wastewater problems exist	Public Utility Commission performs joint inspection with Ohio EPA for hazardous waste transporters.
Oregon	Department of Environmental Resources	1	Hazardous waste inspections; permitting	1	1 Person	Only one hazardous waste facility in Oregon.

(Continued)

HAZARDOUS WASTE INSPECTOR PROGRAMS* (Continued)

State	Name of Agency	No. of Inspectors	Duties of Inspectors	No. of Inspections Per Month Per Inspector	No. of Persons on An Inspection Team	Comments
Pennsylvania	Department of Environmental Resources	35	Hazardous waste inspections; non-hazardous waste inspections	Not identified	Usually 1-person-team; 2-person team used for large commercial facilities; sometimes a soil scientist or hydrogeologist accompanies the team	None.
South Carolina	Department of Health & Environmental Control	20	Hazardous waste inspections; non-hazardous waste inspections; complaints; field work	2-5	2-Person-team on all major facilities (1 field inspector & 1 engineer); 1-person-team usually for all others	No turnovers of inspector staff have occurred yet.
Texas	Department of Water Resources	45	Hazardous waste inspections; air quality inspections; water quality inspections	(70 inspections is the goal for all inspectors for one month)	1 Person	Department of Health does some hazardous waste inspections as a result of its mandate to inspect municipal landfills (which can accept a small amount of industrial wastes).
Washington	Department of Ecology	10	Hazardous waste inspections; spill response, permit review, technical assistance, enforcement, Superfund site identification	1-2	Usually 1-person-team. Sometimes EPA person goes along. Rarely a team includes a chemist, chemical engineer and/or hydrogeologist	None.
West Virginia	Department of Natural Resources	4	Hazardous waste inspections	4-8	For major facilities, 3-person-team used (reason for size of team: 3 needed to handle equipment and for safety reasons)	West Virginia has not yet received Phase I RCRA authorization. Working under cooperative agreement with EPA at present.

*Table compiled by Policy Analysis Department, Radian Corporation, Austin, Texas. Material is up to date through April 12, 1982.

HAZARDOUS WASTE INSPECTOR QUALIFICATIONS*

State	Agency	Minimum Education Requirements	Minimum Experience Requirements	Competency Test?	Other Qualifications	Training Program Required?	Description of Training Programs
Alabama	Board of Public Health	College degree including 30 hours of science courses	None required	Civil Service test as part of employment procedure	None	Yes	On-the-job training by supervisors and other inspectors. Attend training courses given by EPA. Periodic training by extension services of state.
Arkansas	Department of Pollution Control & Ecology	College degree in chemistry, biology, environmental science or related field	1 year experience with hazardous waste or toxic substances	No	None	Yes	Training by EPA and by in-house staff in the form of seminars and lectures. Have attended out-of-state consultant seminars. No on-the-job training because all inspectors were hired at the same time.
		Level of education OR not specified	5 years experience with hazardous waste or related activity				
California	Department of Health Services	College degree in chemical engineering, mechanical engineering, civil engineering or environmental engineering or college degree in chemistry, biology	None required	No	None	Yes	Two-thirds of training program done by outsiders; one-third done by staff. Training in protective clothing, sampling, chain of custody, toxicology, spill response. One-week courses typical, some shorter. Annual physical required.
Delaware	Department of Natural Resources & Environmental Conservation	Associates degree in environmental engineering or closely related field	None required	No	No	Yes	On-the-job training for 3 months by the preceding inspector. Attended EPA Region III course on hazardous materials response.
Georgia	Department of Natural Resources	College degree in either chemistry or environmental-related field or engineering	None required. (Job market is such that the inspectors who are hired usually have some experience.)	No	No	Yes	On-the-job training. Annually send each inspector to association meeting or training course of their choice. Annually, attend 1-week course at EPA in October. Send someone to attend 2-day EPA courses.

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HAZARDOUS WASTE INSPECTOR QUALIFICATIONS* (Continued)

State	Agency	Minimum Education Requirements	Minimum Experience Requirements	Competency Test?	Other Qualifications	Training Program Required?	Description of Training Programs
Illinois	Environmental Protection Agency	College degree in science-related field. Most present inspectors have biology degrees	None required	No	None	Not at present	Training program administered by USEPA during 4-5 days in February 1981, when program started. An inspector is occasionally sent to a training course now, but this is not required, nor is there any briefing for other inspectors on content.
Iowa	Department of Environmental Quality	College degree (informal policy to hire those with degrees in biological sciences)	None required	No	None	Yes	Training consists of workshops in central office. On-the-job training. All training is in-house.
Kentucky	Department of Natural Resources & Environmental Protection	College degree (informal policy to hire candidates with degree in biology, chemistry or environmental field)	None required	No	None	Yes	Training program begins with training in central office (1 week) followed by on-the-job training in one of ten field offices. Training period lasts approximately 6 months.
Louisiana	Department of Natural Resources	College degree with 12-semester hours in chemistry and course work in biology, chemical, environmental, nuclear or physical science, mathematics, physics, engineering or industrial technology to total 24-semester hours	6 Months of training or experience of technical or programmatic nature dealing with hazardous waste	No	None	No	Receive on-the-job training. No formal in-house training. Have attended EPA & consultant courses.
Maine	Department of Environmental Quality	No specific requirements (present inspectors have a college degree at minimum)	None required (present inspectors have at least 4 years of experience)	No	None	No	Present inspectors were already employed under the oil response program, and were qualified and experienced. Received some on-the-job training about hazardous wastes from EPA. Attended EPA courses in Lexington, Massachusetts.

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HAZARDOUS WASTE INSPECTOR QUALIFICATIONS* (Continued)

State	Agency	Minimum Education Requirements	Minimum Experience Requirements	Competency Test?	Other Qualifications	Training Program Required?	Description of Training Programs
Michigan	Department of Natural Resources	College degree in scientific or technical field or 4 years experience	At least 1 month field experience & completion of at least 5 inspections under the Clean Air Act, Clean Water Act or other such act	No	Successful completion of RCRA training program conducted by implementation offices. Familiarity with RCRA Subtitle C as evidenced by self-certification. Completion of 2 RCRA inspections accompanied by 2 EPA inspectors or RCRA designated certified inspectors. Preparation of 2 RCRA-inspection reports.	Yes	For training program, see "Other Qualifications." These qualifications are necessary for certification. Certification program is training program.
Mississippi	Department of Natural Resources	College degree in engineering or chemistry	None	No	None	Yes	Training by contractors, EPA and in-house staff has helped develop both state and EPA regulations.
Montana	Department of Health & Environmental Services	College degree	None required	No	None	Yes	On-the-job training. Have attended training courses offered by EPA, OSHA, and consultants. No formal in-house training.
New Jersey	Department of Environmental Protection	College degree in science-related field	1 year experience in environmental work	No test. Review process as part of civil service	Must be able to write and must have driver's license	Yes	On-the-job training for 1 to 3 months. Attend lectures on safety equipment, emergency spill response, regulations. Lectures held in-house, by EPA and by consultants.
New York	Department of Environmental Conservation	No specific requirements (candidates usually come from within the Department); job market is such that DEC gets very qualified applicants	None required	No	Inspectors must be certified by EPA	Yes	On-the-job training. Attend training course sponsored by EPA for 2-3 days to receive certification. Investigating other training programs as part of effort to develop in-house training program.

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HAZARDOUS WASTE INSPECTOR QUALIFICATIONS* (Continued)

State	Agency	Minimum Education Requirements	Minimum Experience Requirements	Competency Test?	Other Qualifications	Training Program Required?	Description of Training Programs
North Carolina	Department of Human Resources	College degree in science-related field OR Advanced degree OR College degree in engineering	4 years experience No experience required No experience required	No	None	Yes	Some formal training done in-house. On-the-job training. Occasionally send 1 or 2 inspectors to outside training courses and then give an in-house training course based on that syllabus and program.
North Dakota	Department of Health	No specific requirements (Present inspectors had at least a college degree and experience or a masters degree and no experience) (Inspectors have come from DH staff)	None required	No	None	Yes	Have attended training courses offered by EPA. No in-house training.
Ohio	Environmental Protection Agency	No specific requirements (although must have had courses in mathematics, chemistry, biology or related fields in order to pass employment test)(see Competency Test)	None required	Must take objective test on chemistry/biology as part of employment process	None	Yes	Each inspector hired must attend in-house course on chemistry of hazardous waste materials taught by chemist or chemical engineer. Attend training sessions every 2 months offered by USEPA, consulting firms, Fire Marshall Academy.
Oregon	Department of Environmental Quality	Currently, inspector has a masters degree in chemcial engineering	Currently, inspector has 3-5 years experience	No	None	No	No training at present time.
Pennsylvania	Department of Environmental Resources	College degree in physical science or equivalent	None required	No	None	Yes	On-the-job training by supervisor and staff at regional offices for 1 year. Some training by consultants.
South Carolina	Department of Health & Environmental Control	College degree in natural science or related field	None required	No	None	Yes	Training with EPA inspection manual by in-house staff. On-the-job training. Occasionally send inspectors to EPA training courses.

(Continued)

HAZARDOUS WASTE INSPECTOR QUALIFICATIONS* (Continued)

State	Agency	Minimum Education Requirements	Minimum Experience Requirements	Competency Test?	Other Qualifications	Training Program Required?	Description of Training Programs
Texas	Department of Water Resources	No specific requirements (informal policy that hazardous waste inspectors must come from TDWR staff).	None required	No	None	Yes	On-the-job training. Attend lectures on safety, hazardous waste sampling techniques, identification of problems.
Washington	Department of Energy	College degree	1 or 2 years in industrial processes	No	None	No	No training at present time because of lack of funds.
West Virginia	Department of Natural Resources	College degree in science-related field (most present inspectors transferred from within DNR)	None required	No	Inspectors must be certified by EPA	Yes	Attend EPA training course for 1 week to receive certification. In-house training, sometimes given with EPA staff assistance, is also provided.
Federal Government	USEPA Region V	College degree in scientific area qualified to be GS-7 or better	None required	No	Civil Service Examination	Yes	In-house training courses and on-the-job training.

Source: Telephone contacts with states and EPA.

*Table compiled by Policy Analysis Department, Radian Corporation, Austin, Texas. Material is up to date through April 12, 1982.

MODEL UNIFORM BOILER AND PRESSURE VESSEL SAFETY BILL

for

STATES

Recommended by

UNIFORM BOILER AND PRESSURE VESSEL
LAWS SOCIETY, INC.
57 PRATT STREET
HARTFORD, CONNECTICUT 06103

PREFACE

The Model Uniform Boiler and Pressure Vessel Bill was revised by a committee representing the industry (manufacturers, insurers and users) and was approved by the Council of the Uniform Boiler and Pressure Vessel Laws Society, Inc. on June 21, 1977.

It is designed for the purpose of assisting those groups interested in promulgating a law to provide for the safety of personnel and property in the construction, installation, inspection, maintenance and repair of boilers and pressure vessels.

Further assistance in the presentation of proposed boiler or pressure vessel legislation, or proposed rules and regulations for the administration of existing boiler and pressure vessel laws, is available from the Society upon request.

The Uniform Boiler and Pressure Vessel Laws Society, Inc. is a nonpolitical, noncommercial, nonprofit, technical body supported by the voluntary contributions of its members who are individuals, firms and organizations engaged in the manufacture, sale, use, insurance or inspection of material or apparatus related to the boiler and pressure vessel industry. Its objective is to secure uniformity in the laws, rules or regulations, and administration which affect the boiler and pressure vessel industry, inspection agencies, and users. The Society believes that such laws and rules or regulations should follow nationally accepted codes and standards. It recommends the "ASME Boiler and Pressure Vessel Code" as the standard for construction and the "Inspection Code" of the National Board of Boiler and Pressure Vessel Inspectors or APIRP 510 of the American Petroleum Institute, as applicable, for inspection. The direction of the Society is vested in the Council elected in accordance with the bylaws of the Society.

STATE OF ....

BOILER AND PRESSURE VESSEL SAFETY BILL

An Act to Provide for the Safety of Life, Limb and Property, and to Create a Board of Boiler and Pressure Vessel Rules to Serve Without Salary and to Formulate and Promulgate Rules and Regulations for the Safe Construction, Installation, Inspection, Maintenance and Repair of Boilers and Pressure Vessels; To Provide for the Enforcement of the Rules and Regulations Promulgated by the Board of Boiler and Pressure Vessel Rules; To Provide for the Examination and Appointment of Boiler and Pressure Vessel Inspectors; To Provide for the Inspection of Boilers and Pressure Vessels, Fees to be Charged Thereof, and the Reports to be Made Thereof; To Provide for Inspection Certificates; To Provide for Appeals; To Provide an Appropriation to Carry out the Provisions of the Act; To Provide for Exclusive Jurisdiction by the State; and To Provide a Penalty for the Violation of the Provisions of this Act.

BE IT ENACTED BY THE ....

OF THE ....

SECTION 1. TITLE AND DEFINITIONS

This Act shall be known and may be cited as the Boiler and Pressure Vessel Safety Act, and, except as otherwise herein provided, shall apply to all boilers and pressure vessels. For the purpose of this Act, the following definitions apply:

A. Boiler - a closed vessel in which water or other liquid is heated, steam or vapor is generated, steam is superheated, or in which any combination of these functions is accomplished, under pressure or vacuum, for use externally to itself, by the direct application of energy from the combustion of fuels, or from electricity, solar or nuclear energy. The term boiler shall include fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves.

1. Power Boiler - a boiler in which steam or other vapor is generated at a pressure of more than fifteen (15) psig.

2. High Pressure, High Temperature Water Boiler - a water boiler operating at pressures exceeding 160 psig or temperatures exceeding 250°F.

3. Heating Boiler - a steam or vapor boiler operating at pressures not exceeding 15 psig, or a hot water boiler operating at pressures not exceeding 160 psig or temperatures not exceeding 250°F.

B. Pressure Vessel - a vessel in which the pressure is obtained from an external source or by the application of heat other than those vessels defined in paragraph A of this subsection.

C. Certificate Inspection - an inspection, the report of which is used by the Chief Inspector to determine whether or not a certificate as provided by subsection C of Section 14 may be issued.

SECTION 2. BOARD OF BOILER AND PRESSURE VESSEL RULES

A. Board created. There is hereby created within the Department of Labor a Board of Boiler and Pressure Vessel Rules, which shall hereinafter be referred to as the Board, consisting of nine members, the majority of whom have experience in design, construction, inspection, repair or operation of boilers or pressure vessels; eight of these members shall be appointed by the Governor, two for a term of one year, two for a term of two years, two for a term of three years, and two for a term of four years. At the expiration of their respective terms of office, they, or their successors identifiable with the same interest respectively as hereinafter provided, shall be appointed for terms of four years each. The Governor may at any time remove any member of the Board for inefficiency or neglect of duty in office. Upon the death or incapacity of any member, the Governor shall fill the vacancy for the remainder of the vacated term with a representative of the same interests with which his predecessor was identified. Of these eight appointed members (the majority of whom shall be registered professional engineers when available), one shall be a representative of owners and users of power boilers having experience with such boilers, one shall be a representative of owners and users of heating boilers, one shall be a representative of owners and users of pressure vessels having experience with such vessels, one shall be a representative of boiler or pressure vessel manufacturers, one shall be a representative of the crafts involved in the construction, repair or operation of boilers or pressure vessels, one shall be a presentative of the heating contractors, one shall be a representative of a company licensed to insure and insuring in this State boilers and pressure vessels, and one shall represent the public, such as a mechanical engineer on the faculty of a recognized engineering college within the State or a licensed professional engineer. The ninth member of the Board shall be the jurisdictional representative responsible for public and/or occupational safety. The Board shall elect one of its members to serve as Chairman for a term not exceeding four years. The Board shall meet at least two times each year at the call of the Chairman at the Capitol or other place designated by the Chairman. No approval, decision or ruling of the Board shall be effective unless supported by the vote of at least five members thereof.

B. Board to Serve Without Salary; Expenses Allowed. The members of the Board shall serve without salary and shall receive their actual traveling and hotel expenses, incurred while in the performance of their duties as members of the Board, to be paid in the same manner as in the case of other State officers.

SECTION 3. RULES AND REGULATIONS

A. Formulation. The Board shall formulate definitions, rules and regulations for the safe construction, installation, inspection, maintenance and repair of boilers and pressure vessels in this State.

1. The definition, rules and regulations so formulated for new construction shall be based upon and, at all times, follow the generally accepted nationwide engineering standards, formulae and practices established and pertaining to boiler and pressure vessel construction and safety, and the

Board may by resolution adopt an existing published codification thereof, known as the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers, with the amendments and interpretations thereto made and approved by the Council of the Society, and may likewise adopt the amendments and interpretations subsequently made and published by the same authority; and when so adopted the same shall be deemed incorporated into, and to constitute a part of the whole of the definitions, rules and regulations of the Board. Amendments and interpretations to the Code so adopted shall be effective immediately upon being promulgated, to the end that the definitions, rules and regulations shall at all times follow the generally accepted nationwide engineering standards.

2. The Board shall formulate rules and regulations for the inspection, maintenance and repair of boilers and pressure vessels, which were in use in this State prior to the date upon which the first rules and regulations under this Act pertaining to existing installations become effective, or during the twelve (12) month period immediately thereafter. The rules and regulations so formulated shall be based upon and at all times follow generally accepted nationwide engineering standards and practices and may adopt sections of the Inspection Code of the National Board of Boiler and Pressure Vessel Inspectors or APIRP 510 of the American Petroleum Institute, as applicable.

B. Promulgation. The rules and regulations and any subsequent amendments thereto formulated by the Board shall, immediately following a hearing upon not less than twenty (20) days notice as hereinafter provided, be approved and published and when so promulgated shall have the force and effect of law, except that the rules applying to the construction of new boilers and pressure vessels shall not become mandatory until twelve (12) months after their promulgation by the Board. Notice of the hearing shall give the time and place of the hearing and shall state the matters to be considered thereat. Such notice shall be given to all persons directly affected by such hearing. In the event all persons directly affected are unknown, notice may be perfected by publication in a newspaper of general circulation in this State at least twenty (20) days prior to such hearing.

C. Amendments. Subsequent amendments to the rules and regulations adopted by the Board shall be permissive immediately and shall become mandatory twelve (12) months after their promulgation.

SECTION 4. NEW BOILER AND PRESSURE VESSEL INSTALLATIONS

No boiler or pressure vessel which does not conform to the rules and regulations of the Board governing new construction and installation shall be installed and operated in this State after twelve (12) months from the date upon which the first rules and regulations under this Act pertaining to new construction and installation shall have become effective, unless the boiler or pressure vessel is of special design or construction, and is not inconsistent with the spirit and safety objectives of such rules and regulations, in which case a special installation and operating permit may at its discretion be granted by the Board.

SECTION 5. EXISTING BOILER AND PRESSURE VESSEL INSTALLATIONS

A. The maximum allowable working pressure of a boiler carrying the ASME Code symbol or of a pressure vessel carrying the ASME or API-ASME symbol shall be determined by the applicable sections of the code under which it was constructed and stamped. Subject to the concurrence of the enforcement authority at the point of installation, such a boiler or pressure vessel may be re-rated in accordance with the rules of a later edition of the ASME Code and in accordance with the rules of the National Board Inspection Code or APIRP 510, as applicable.

B. The maximum allowable working pressure of a boiler or pressure vessel which does not carry the ASME or the API-ASME Code symbol shall be computed in accordance with the Inspection Code of the National Board of Boiler and Pressure Vessel Inspectors.

C. This Act shall not be construed as in any way preventing the use, sale or reinstallation of a boiler or pressure vessel referred to in this section, provided it has been made to conform to the rules and regulations of the Board governing existing installations and provided, further, it has not been found upon inspection to be in an unsafe condition.

SECTION 6. EXEMPTIONS

A. This Act shall not apply to the following boilers and pressure vessels:

1. Boilers and pressure vessels under Federal control;

2. Pressure vessels used for transportation and storage of compressed or liquefied gases when constructed in compliance with specifications of the U.S. Department of Transportation and when charged with gas or liquid, marked, maintained, and periodically requalified for use, as required by appropriate regulations of the U. S. Department of Transportation;

3. Pressure vessels located on vehicles operating under the rules of other State or Federal authorities and used for carrying passengers or freight;

4. Air tanks installed on the right of way of railroads and used directly in the operation of trains;

5. Pressure vessels that do not exceed (a) 5 cubic feet in volume and 250 psig pressure, or (b) 1½ cubic feet in volume and 600 psig pressure, or (c) an inside diameter of 6 inches with no limitation on pressure;

6. Pressure vessels having an internal or external working pressure not exceeding 15 psig; with no limit on size;

7. Pressure vessels with a nominal water-containing capacity of 120 gallons or less for containing water under pressure, including those containing air, the compression of which serves only as a cushion;

8. Pressure vessels containing water heated by steam or any other indirect means when none of the following limitations are exceeded:

a. A heat input of 200,000 BTU per hour.

b. A water temperature of 210°F.

c. A nominal water containing capacity of 120 gallons.

9. Hot water supply boilers which are directly fired with oil, gas or electricity when none of the following limitations is exceeded:

a. Heat input of 200,000 BTU per hour.

b. Water temperature of 210°F.

c. Nominal water capacity of 120 gallons.

These exempt hot water supply boilers shall be equipped with ASME-National Board approved safety relief valves.

10. Pressure vessels in the care, custody, and control of research facilities and used solely for research purposes which require one or more details of non-Code construction or which involve destruction or reduced life expectancy of those vessels.

11. Pressure vessels which are under the regulation and control of ....(here insert name of specific State authority) under .... (here insert chapter or section reference to the existing statute).

12. Pressure vessels or other structures or components that are not considered to be within the scope of ASME Code, Section VIII.

B. The following boilers and pressure vessels shall be exempt from the requirements of Sections 13 (B) (C) (D), 14, 15 and 16 of this Act:

1. Boilers or pressure vessels located on farms and used solely for agricultural or horticultural purposes;

2. Heating boilers or pressure vessels which are located in private residences or in apartment houses of less than six (6) family units;

3. Any pressure vessel used as an external part of an electrical circuit breaker or transformer;

4. Pressure vessels on remote oil or gas producing lease locations that have fewer than ten buildings intended for human occupancy per 0.25 square mile and where the closest building is at least 220 yards from any vessel;

5. Pressure vessels operated entirely full of water or other liquid which is not materially more hazardous than water, provided the temperature of the

vessel contents does not exceed 150°F and the pressure does not exceed 200 psi.

SECTION 7. CHIEF INSPECTOR

A. How Appointed. Within sixty (60) days after the passage of this Act and at any time thereafter that the office of the Chief Inspector may become vacant, the Commissioner of Labor shall appoint a citizen of this State, or, if not, available, a citizen of another State, who shall have had at the time of such appointment not less than five (5) years experience in the construction, installation, inspection, operation, maintenance or repair of high pressure boilers and pressure vessels as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector, and who shall have passed the same kind of examination as that prescribed under Section 10 of this Act, to be Chief Inspector. Such Chief Inspector may be removed for cause after due investigation by the Board and their recommendation to the Commissioner.

B. Powers. The Chief Inspector, if authorized by the Commissioner is hereby charged, directed and empowered:

1. to take action necessary for the enforcement of the laws of the State governing the use of boilers and pressure vessels to which this Act applies and of the rules and regulations of the Board;

2. to keep a complete record of the name of each owner or user, and his location and, except for pressure vessels covered by an owner/user inspection service, the type, dimensions, maximum allowable working pressure, age, and the last recorded inspection of all boilers and pressure vessels to which the Act applies;

3. to publish and make available to anyone requesting them copies of the rules and regulations promulgated by the Board;

4. to issue, or to suspend or revoke for cause, inspection certificates as provided for in Section 14 of this Act;

5. to cause the prosecution of all violators of the provisions of this Act;

6. to draw upon the State Treasurer for funds necessary to meet the expense authorized by this Act, which shall include the necessary traveling expenses of the Chief Inspector and his Deputies and the expense incident to the maintenance of his office.

SECTION 8. DEPUTY INSPECTORS

The Commissioner shall employ Deputy Inspectors who shall be responsible to the Chief Inspector and who shall have had at the time of appointment not less than three (3) years experience in the construction, installation, inspection, operation, maintenance or repair of high pressure boilers and pressure vessels as a mechanical engineer, steam operating engineer, boilermaker or boiler inspector, and who shall have passed the examination provided for in Section 10 of this Act.

SECTION 9. SPECIAL INSPECTORS AND OWNER/USER INSPECTORS

A. In addition to the Deputy Inspectors authorized by Section 8 of this Act, the Commissioner shall, upon the request of any company licensed to insure and insuring in this State boilers and pressure vessels, or, upon the request of any company operating pressure vessels in this State for which the owner or user maintains a regularly established inspection service which is under the supervision of one or more technically competent individuals whose qualifications are satisfactory to the Board and causes said pressure vessels to be regularly inspected and rated by such inspection service in accordance with applicable provisions of the rules and regulations adopted by the Board pursuant to Section 3 of this Act, issue to any inspectors of said insurance company Certificates of Competency as Special Inspectors and to any inspectors of said company operating pressure vessels Certificates of Competency as owner/user inspectors, provided that each such inspector before receiving his Certificate of Competency shall satisfactorily pass the examination provided for by Section 10 of this Act, or, in lieu of such examination, shall hold a Commission or a Certificate of Competency as an inspector of boilers or pressure vessels for a State that has a standard of examination substantially equal to that of this State or a Commission as an inspector of boilers and pressure vessels issued by the National Board of Boiler and Pressure Vessel Inspectors. A Certificate of Competency as an Owner/User Inspector shall be issued to an inspector of a company operating pressure vessels in this State only if, in addition to meeting the requirements stated herein, the inspector is employed full time by the company and is responsible for making inspections of pressure vessels used, or to be used, by such company, and which are not for resale.

B. Such Special Inspectors or Owner/User Inspectors shall receive no salary from, nor shall any of their expenses be paid by the State and the continuance of their Certificates of Competency shall be conditioned upon their continuing in the employ of the boiler insurance company duly authorized as aforesaid or in the employ of the company so operating pressure vessels in this State and upon their maintenance of the Standards imposed by this Act.

C. Such Special Inspectors or Owner/User Inspectors may inspect all boilers and pressure vessels insured or all pressure vessels operated by their respective companies and, when so inspected, the owners and users of such boilers and pressure vessels shall be exempt from the payment to the State of the inspection fees provided for in Section 16 of this Act.

SECTION 10. EXAMINATION

Examination for Chief, Deputy, Special or Owner/User Inspectors shall be in writing and shall be held by the Board, or by an Examining Board appointed in accordance with National Board requirements, with at least two members present at all times during the examination. Such examination shall be confined to questions the answers to which will aid in determining the fitness and competency of the applicant for the intended service, and may be those prepared by the National Board of Boiler and Pressure Vessel Inspectors. In case an applicant fails to pass the examination, he may appeal to the Board for another examination which shall be given by the Board after ninety (90) days. The record of an applicant's examination shall be accessible to said applicant and his employer.

SECTION 11. SUSPENSION OR REVOCATION OF CERTIFICATE OF COMPETENCY

A. An inspector's Certificate of Competency may be suspended by the Commissioner after due investigation and recommendation by the Board, for the incompetence or untrustworthiness of the holder thereof or for wilful falsification of any matter or statement contained in his application or in a report of any inspection made by him. Written notice of any such suspension shall be given by the Commissioner within not more than ten (10) days thereof to the inspector and his employer. A person whose Certificate of Competency has been suspended shall be entitled to an appeal to the Board as provided in Section 18 of this Act and to be present in person and to be represented by counsel at the hearing of the appeal.

B. If the Board has reason to believe that an inspector is no longer qualified to hold his Certificate of Competency, the Board shall, upon not less than ten (10) days written notice to the inspector and his employer, hold a hearing at which such inspector and his employer shall have an opportunity to be heard. If, as a result of such hearing, the Board shall find that such inspector is no longer qualified to hold his Certificate of Competency, the Board shall recommend to the Commissioner that such Certificate of Competency be revoked and the Commissioner shall thereupon revoke such Certificate of Competency forthwith.

C. A person whose Certificate of Competency has been suspended shall be entitled to apply, after ninety (90) days from the date of such suspension, for reinstatement of such Certificate of Competency.

SECTION 12. REPLACEMENT OF CERTIFICATE OF COMPETENCY

If a Certificate of Competency is lost or destroyed, a new Certificate of Competency shall be issued in its place without another examination.

SECTION 13. INSPECTION OF CERTIFICATE OF COMPETENCY

A. The Commissioner, the Chief Inspector, or any Deputy Inspector shall have free access, during reasonable hours, to any premises in the State where a boiler or pressure vessel is being constructed for use in, or is being installed in this State for the purpose of ascertaining whether such boiler or pressure vessel is being constructed and installed in accordance with the provisions of this Act.

B. On and after .... each boiler and pressure vessel used or proposed to be used within this State, except for pressure vessels covered by an owner/user inspection service as described in Section 13 (D) or except for boilers or pressure vessels exempt under Section 6 of this Act (Owners and users may request to waive this exemption), shall be thoroughly inspected as to their construction, installation and condition as follows:

1. Power boilers and high pressure high temperature water boilers shall receive a certificate inspection annually which shall be an internal inspection where construction permits; otherwise it shall be as complete an inspection as possible. Such boilers shall also be externally inspected while under pressure if possible.

2. Low pressure steam or vapor heating boilers shall receive a certificate inspection biennially with an internal inspection every four years where construction permits.

3. Hot water heating and hot water supply boilers shall receive a certificate inspection biennially with an internal inspection at the discretion of the Inspector.

4. Pressure vessels subject to internal corrosion shall receive a certificate inspection triennially with an internal inspection at the discretion of the Inspector. Pressure vessels not subject to internal corrosion shall receive a certificate inspection at intervals set by the Board.

5. Nuclear vessels within the scope of this Act shall be inspected and reported in such form and with such appropriate information as the Board shall designate.

6. A grace period of two months beyond the periods specified in subdivisions 1, 2, 3 and 4 of this subsection may elapse between certificate inspections.

7. The Board may provide for longer periods between certificate inspections, in its rules and regulations.

8. Under the provisions of this Act, the Board is responsible to provide for the safety of life, limb and property and therefore has jurisdiction over the interpretation and application of the inspection requirements as provided for in the rules and regulations which they have promulgated. Inspection during construction and installation shall certify as to the minimum requirements for safety as defined in the ASME Code. Inspection requirements of operating equipment shall be in accordance with generally accepted practice and compatible with the actual service conditions, such as:

a. Previous experience, based on records of inspection, performance and maintenance.

b. Location, with respect to personnel hazard.

c. Quality of inspection and operating personnel.

d. Provision for related safe operation controls.

e. Interrelation with other operations outside the scope of this Act.

Based upon documentation of such actual service conditions by the owner or user of the operating equipment, the Board may, in its discretion, permit variations in the inspection requirements.

C. The inspections herein required shall be made by the Chief Inspector, by a Deputy Inspector, by a Special Inspector or by an Owner/User Inspector provided for in this Act.

D. Owner/User inspection of pressure vessels is permitted provided the owner/user inspection service is regularly established and is under the supervision of one or more individuals whose qualifications are satisfactory to the Board and said owner/user causes the pressure vessels to be inspected in conformance with the National Board Inspection Code or APIRP 510, as applicable.

E. If, at the discretion of the inspector, a hydrostatic test shall be deemed necessary, it shall be made by the owner or user of the boiler or pressure vessel.

F. All boilers (other than cast iron sectional boilers) and pressure vessels to be installed in this State after the twelve (12) months period from the date upon which the rules and regulations of the Board shall become effective shall be inspected during construction as required by the applicable rules and regulations of the Board by an inspector authorized to inspect boilers and pressure vessels in this State, or, if constructed outside of the State, by an inspector holding a Commission issued by the National Board of Boiler and Pressure Vessel Inspectors.

SECTION 14. INSPECTION REPORTS - INSPECTION CERTIFICATES

A. Each company employing Special Inspectors shall, within thirty (30) days following each certificate inspection made by such inspectors, file a report of such inspection with the Chief Inspector upon appropriate form as promulgated by the National Board of Boiler and Pressure Vessel Inspectors. The filing of reports of external inspections, other than Certificate Inspections, shall not be required except when such inspections disclose that the boiler or pressure vessel is in a dangerous condition.

B. Each company operating pressure vessels covered by owner/user inspection service meeting the requirements of subsection (A) of Section 9 of this Act shall maintain in its files an inspection record which shall list, by number and such abbreviated description as may be necessary for identification, each pressure vessel covered by this Act, the date of the last inspection of each pressure vessel and the approximate date for the next inspection. The inspection record shall be available for examination by the Chief Inspector or his authorized representative during business hours. Each such company shall, in addition, file annually with the Chief Inspector a statement, signed by the individual having supervision over the inspections made during the period covered thereby, stating the number of pressure vessels covered by this Act inspected during the year and certifying that each such inspection was conducted pursuant to the inspection requirements provided for by this Act.

Such annual statement shall be accompanied by a filing fee in accordance with the following schedule:

For statements covering not more than 25 vessels - $___ per vessel;
For statements covering more than 25 but less than 101 vessels - $___;
For statements covering more than 100 but less than 501 vessels - $___;
For statements covering more than 500 vessels - $___.

C. If the report filed pursuant to subsection (A) of this Section shows that a boiler or pressure vessel is found to comply with the rules and regulations of the Board, the owner or user thereof shall pay directly to the Chief Inspector the sum of ____($___) dollars and the Chief Inspector, or his duly authorized representative, shall issue to such owner or user an Inspection Certificate bearing the date of inspection and specifying the maximum pressure under which the boiler or pressure vessel may be operated. Such Inspection Certificate shall be valid for not more than fourteen (14) months from its date in the case of power boilers, twenty-six (26) months in the case of heating and hot water supply boilers and thirty-eight (38) months in the case of pressure vessels. In the case of those boilers and pressure vessels covered by subdivisions 1, 2, 3 and 4 of subsection (B) of Section 13 of this Act for which the Board has established or extended the operating period between required inspections, pursuant to the provisions of subdivision 7 or 8 of said subsection (B) of Section 13, the certificate shall be valid for a period of not more than two months beyond the period set by the Board. Certificates for boilers shall be posted under glass, or similarly protected, in the room containing the boiler. Pressure vessel certificates shall be posted in like manner, if convenient, or filed where they will be readily accessible for examination.

D. No Inspection Certificate issued for an insured boiler or pressure vessel based upon a report of a Special Inspector IN THE EMPLOY OF THE INSURING COMPANY shall be valid after the boiler or pressure vessel for which it was issued shall cease to be insured by a company duly authorized by this State to provide such insurance.

E. The Commissioner or his authorized representative may at any time suspend an Inspection Certificate after showing cause that the boiler or pressure vessel for which it was issued, cannot be operated without menace to the public safety, or when the boiler or pressure vessel is found not to comply with the rules and regulations herein provided. Each suspension of an Inspection Certificate shall continue in effect until such boiler or pressure vessel shall have been made to conform to the rules and regulations of the Board, and until said Inspection Certificate shall have been reinstated.

SECTION 15. INSPECTION CERTIFICATE REQUIRED: PENALTY

After twelve (12) months for power boilers, twenty-four (24) months for low pressure steam heating, hot water heating and hot water supply boilers and thirty-six (36) months for pressure vessels following the date on which this Act becomes effective it shall be unlawful for any person, firm, partnership or corporation to operate in this State a boiler or pressure vessel, except a pressure vessel covered by owner/user inspection service as provided for in Section 14, without a valid Inspection Certificate. The operation of a boiler or pressure vessel without such Inspection Certificate, or at a pressure exceeding that specified in such Inspection Certificate or in violation of this act or the rules and regulations promulgated under it, shall constitute a misdemeanor on the part of the owner, user or operator thereof and shall be punishable by a fine not exceeding ____($____) dollars, or imprisonment not to exceed ________, or both, at the discretion of the court.

SECTION 16. INSPECTION FEES

A. Schedule of Fees. The owner or user of a boiler or pressure vessel required by this Act to be inspected by the Chief Inspector, or his Deputy Inspector, shall pay directly to the Chief Inspector, upon completion of inspection, fees in accordance with the following schedule:

1. Power Boilers and high pressure, high temperature water boilers:

Certificate Inspections

Boilers of 50 sq. ft. of heating surface or less..........$_____

Boilers over 50 sq. ft. of heating surface and less than 4,000 sq. ft. of heating surface..................$_____

Boilers of 4,000 sq. ft. of heating surface or more and less than 10,000 sq. ft. of heating surface.........$_____

Boilers of 10,000 sq. ft. of heating surface or more......$_____

External Inspections

Boilers of 50 sq. ft. of heating surface or less..........$_____

Boilers over 50 sq. ft. of heating surface................$_____

Not more than the equivalent of the certificate and external inspection fees shall be charged or collected for any and all inspections as above of any boiler in any one year.

2. Heating boilers:

Certificate Inspections

Heating boilers without a manhole.........................$_____

Heating boilers with a manhole............................$_____

Hot water supply boilers..................................$_____

Not more than one fee shall be charged or collected for any and all inspections as above of any heating boiler in any required inspection period.

3. Pressure Vessels:

Certificate Inspections

Fees to be based on the maximum length of the vessel times the maximum width or diameter thereof in feet.

Each pressure vessel subject to inspection having a product as determined above of 50 sq. ft. or less...................$_____

For each additional 100 sq. ft. of area in excess of 50 sq. ft., or fraction thereof..................$______

Not more than $____ shall be paid for each inspection on any one vessel.

A group of pressure vessels, such as the rolls of a paper machine or dryer operating as a single machine or unit, shall be considered as one pressure vessel.

Not more than one fee shall be charged or collected for any and all inspections as above of any pressure vessel in any required inspection period.

4. Hydrostatic tests:

When it is necessary to make a special trip to witness the application of a hydrostatic test, an additional fee based on the scale of fees applicable to a certificate inspection of the boiler or pressure vessel shall be charged.

5. All other inspections, including shop inspections, special inspections, and inspections of secondhand or used boilers or pressure vessels made by the Chief or Deputy Inspector shall be charged for at the rate of not less than ______ dollars for one half day of four hours, and ______ dollars for one full day of eight hours, plus all expenses, including traveling and hotel.

"Secondhand" shall mean an object which has changed ownership and location after primary use.

B. Disposition of fees. The Chief Inspector shall transfer all fees so received to the Treasurer of the State.

SECTION 17. CHIEF AND DEPUTY INSPECTORS TO FURNISH BOND

The Chief Inspector shall furnish a bond in the sum of five thousand ($5,000) dollars and each of the Deputy Inspectors, employed and paid by the State, shall furnish a bond in the sum of two thousand ($2,000) dollars, conditioned upon the faithful performance of their duties and upon a true account of moneys handled by them respectively and the payment thereof to the proper recipient. The cost of said bonds shall be paid by the State Treasurer.

SECTION 18. APPEALS

Any person aggrieved by an order or an act of the Commissioner or the Chief Inspector, under this Act may, within fifteen (15) days of notice thereof, appeal from such order or act to the Board which shall, within thirty (30) days thereafter, issue an appropriate order either approving or disapproving said order or act. A copy of such order by the Board shall be given to all interested parties.

Within thirty (30) days after any order or act of the Board any person aggrieved thereby may file a petition in the _______ Court, of the County of _______ for a review thereof. The Court shall summarily hear the petition and may make any appropriate order or decree.

SECTION 19. APPROPRIATION

The sum of ________, or as much thereof as may be necessary, is hereby appropriated for the preparation, printing and distribution of the rules and regulations promulgated by the Board and for the purpose of carrying out all the other provisions of this Act.

SECTION 20. STATE TO HAVE EXCLUSIVE JURISDICTION

No city, town or other governmental subdivision shall have the power to make any laws, ordinances or resolutions providing for the construction, installation, inspection, maintenance and repair of boilers and pressure vessels within the limits of such city, town or governmental subdivision and any such laws, ordinances or resolutions heretofore made or passed shall be void and of no effect.

SECTION 21. REPEAL CLAUSE

All acts and parts of acts inconsistent with any provisions of this Act are hereby repealed to the extent of such inconsistency.

SECTION 22. CONSTITUTIONALITY OF ACT

The fact that any section, subsection, sentence, clause or phrase of this Act is declared unconstitutional or invalid for any reason shall not affect the remaining portions of this Act.

SUMMARY OF INSPECTION PROGRAM COST ESTIMATES UNDER THREE CASES

Case 1: Each of approximately 10,000 facilities is given a standard inspection.1/ Approximately one-third of the facilities are given annually a more comprehensive inspection, including verification analysis of waste samples and groundwater monitoring:

- Standard inspection at $500 to $1000 per facility x 10,000 sites = $5 to $10 million
- Incremental waste sampling and analysis 2/ at $1000 to $2500 per facility x 3300 sites = $3 to $8 million
- Incremental groundwater samples 3/ at $2000 to $4000 x 900 sites = $2 to $4 million

TOTAL - $10 to $22 million per year

Case 2: Each of the facilities is given a comprehensive inspection annually.4/

- Standard inspection $5 to $10 million
- Incremental sampling and analysis (including groundwater at 2600 facilities) $15 to $36 million

TOTAL - $20 to $46 million per year

Case 3: Each of the facilities is given a comprehensive inspection annually assuming more extensive waste and groundwater sampling in addition to soil and air sampling.

- Standard inspection at $500 to $1000 per facility x 10,000 sites = $5 to $10 million
- Waste sampling at $1000 to $25[illegible] per facility x 10,000 sites - $10 to $25 million
- Groundwater sampling at $2000 to $4000 per facility x 10,000 sites = $20 to $40 million
- Soil sampling at $600 to $3000 per facility x 3300 2/ sites = $2 to $10 million
- Air sampling at $2000 to $3600 per site x 3300 5/ sites = $6.7 to $12 million

TOTAL - $43.7 to $97 million per year

1/ Assumes $100 to $200 for travel, lodging, and miscellaneous materials and $400 to $800 in labor for 8 to 16 hours per facility. Costs will vary according to facility type (e.g., incinerator, landfill), size, waste volumes and composition and other characteristics. Large commercial facilities may require several days; small storage and treatment processes may be inspected in a day or less.

2/ Assumes the typical facility will have one to three samples of waste analyzed as a verification of facility records. Costs for a waste analysis include sample acquisition, laboratory analysis for organic solvents, trace elements, and certain physical tests (acidity, corrosivity, reactivity, ignitability, etc.), for $1000 to $2500 per site. The figure 3300 was used as an approximate one-third of the total.

3/ Groundwater samples at each of the 2600 impoundments, landfills, and land applications are approximately $2000 to $800, assuming that two to four groundwater samples are taken per site. The figure 900 sites was used as an approximate one-third of the total number of facilities requiring groundwater monitoring.

4/ In actual practice, several facilities may require multiple inspections and reinspections while relatively small low risk sites could be given a comprehensive inspection every second or third year, resulting in the equivalent of one inspection per year per facility.

5/ In this case, it is assumed that only facilities which are subject to complaints or exhibit high risks or poor management practices are subject to soil sampling and analysis. The number one-third was selected as a reasonable estimate.

THE HARTFORD STEAM BOILER
INSPECTION and INSURANCE COMPANY
HARTFORD • CONNECTICUT 06102

DONALD K. WILSON, JR.
Vice President

July 7, 1982

The Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
4204 Dirksen Senate Office Building
Washington, D.C. 20510

Re: Proposed Hazardous Waste Inspection Program

Dear Mr. Chairman:

In order that your Committee may have a complete record on which to address the need for improved compliance monitoring in the hazardous waste regulatory system, we take this opportunity to supplement the Statement we delivered on June 24, 1982. Our purpose is to address certain misconceptions concerning our proposal which emerged during the testimony of other witnesses during that hearing.

The Need for a Hazardous Waste Inspection Program

Ms. Rita M. Lavelle, Assistant Administrator of the Environmental Protection Agency (EPA), testified that the current "high level of inspection activity" by State and federal personnel removed the need for inspections by certified independent private parties, envisioned by our proposal. She pointed to a recent rise in inspection activity as supporting the view that the assistance of the private sector was not needed.

However, in a Memorandum to EPA Regional Administrators, dated June 18, 1982 -- less than one week before the hearing, Ms. Lavelle acknowledged that resource constraints would severely limit the ability of the State and federal government to conduct adequate inspection programs.

In this memorandum,Ms. Lavelle set targets for federal and State inspections during fiscal 1983. Only 4,099 inspections of treatment, storage, and disposal (TSD) facilities are projected. Moreover, the total of 6,833 inspections (i.e., TSD facilities plus some generators and transporters) is a far cry from the 15,000 inspections projected for fiscal 1982 in Ms. Lavelle's testimony.

The memorandum notes that variances from these targets may be required because of resource fluctuations. Indeed, the limited future availability of funds for inspection activities is incorporated into EPA's planning. Ms. Lavelle advises the Regional Administrators that States "should be planning for a greater State share in the funding of the State hazardous waste program in future years." Moreover in light of the compelling need to expedite permitting activities, "(a)s grant amounts are not increasing, a shift of resources from other activities to permitting will be required."

This prospective evaporation of funding for State inspection programs is particularly important because of EPA's current heavy reliance on State personnel to conduct inspections. According to Ms. Lavelle's testimony, over 83 percent of the inspections projected for fiscal 1982 to be performed by State officials.

Thus, although EPA recognizes the importance of an inspection program to the hazardous waste regulatory system, it is apparent that federal and State resources will be insufficient to fund a regular inspection program that will adequately assure compliance with applicable facility standards. The resources of the private sector must be efficiently harnessed to the task.

The Board

Our proposal called for the establishment of a Hazardous Waste Inspection Board, within EPA, to develop inspection protocols and to oversee the inspector certification program where the State has not developed an authorized program. We believed that a Board composed of all interested parties, and which could function by a consensus process, would be well-suited to formulate safe and efficient inspection regimes for the various types of TSD facilities. However, an existing standard-setting voluntary body, such as the American National Standards Institute or the American Society for Testing and Materials, or EPA itself (perhaps with the assistance of a voluntary body), could just as easily to the job. The concept of independent private inspections, while it does depend on the existence of uniform standards to guide inspections, does not depend upon those standards being developed by any particular body.

Inspections on Behalf of Insurers

Our proposal would permit, but not require, the insurer covering a TSD facility against liability for environmental impairment to inspect the facility on behalf of the appropriate regulatory agency. This feature, contrary to the assertions of some of the witnesses before your Committee, would enhance rather than detract from the accountability of the inspection program.*

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* Contrary to the assertion in the letter you received from Leslie Cheek of the Crum & Forster Insurance Companies, courts have held that no fiduciary relationship exists between an insurer and its insured. Moore v. Pilot Life Ins. Co., 86 F.2d 197, 199 (4th Cir. 1936); Moses v. Manufacturers Life Ins. Co., 298 F. Supp. 321, 323 (D.S.C. 1968); Hult v. Home Life Ins. Co., 213 Iowa 890, 240 N.W. 218,228 (1932); Stockett v. Penn Mutual Life Ins. Co., 82 R.I. 172, 106 A.2d 741, 744 (1954). Therefore, the claim that such a relationship will inevitably lead to conflicting interests is unfounded.

The liability insurer has an obvious economic interest in preventing accidents or releases at the insured facility. In most cases, the insurance policy provides an exclusion for certain violations of regulatory standards. This gives an insurance company inspector further reason to report violation. This economic incentive toward careful, thorough inspections is further strengthened by the sanctions which could be brought to bear on a certified inspector who inspected improperly or who did not file proper reports.

The insurer's interest in preventing accidents at TSD facilities extends to nonsudden releases. There is always substantial uncertainty as to when, if at all, a violation will result in injury and claims. In view of the economic incentives for thorough inspection and reporting by insurers, we can expect these uncertainties to be resolved in favor of reporting. Moreover, as a rational economic actor, who is seeking to establish a long-term market position, the insurer is vitally interested in the whole hazardous waste regulatory system.

The surest evidence that an insurance company inspector is unlikely to collude with the insured is presented by long experience under the State boiler inspection laws. There, insurance company inspectors regularly report violations by boiler operators to government authorities. This system has operated efficiently and effectively to increase safety, with a virtually spotless record of vigorous compliance review by insurance company inspectors. This record bodes well for the reliability of inspectors affiliated with insurers under a hazardous waste inspection program.

In conclusion, Mr. Chairman, as we testified before your Committee, when we were accompanied by James L. Kimble, Senior Counsel of the American Insurance Association, we believe that our proposal is an innovative and timely way to address the compelling need for improved monitoring of compliance with the regulations applicable to hazardous waste facilities. It effectively addresses public concerns about the regulatory system with minimum impact on the public fisc. We hope that your Committee, after examining the facts, will reach the same conclusion.

Sincerely,

Donald K. Wilson

DKW/JHC/HO
02/3:15/99

cc Leslie Cheek
Rita M. Lavelle
James L. Kimble

National Solid Wastes Management Association

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EUGENE J. WINGERTER
EXECUTIVE DIRECTOR

STATEMENT

Dr. Charles A Johnson
Technical Director

On Behalf of The

NATIONAL SOLID WASTES MANAGEMENT ASSOCIATION

to

Subcommittee on Environmental Pollution

Committee on Environmental and Public Works
United States Senate

June 24, 1982

- COLLECTION COMMITTEE
- INSTITUTE OF CHEMICAL WASTE MANAGEMENT
- INSTITUTE OF RESOURCE RECOVERY
- INSTITUTE OF WASTE EQUIPMENT DISTRIBUTORS
- INSTITUTE OF WASTE TECHNOLOGY
- LANDFILL COMMITTEE
- WASTE EQUIPMENT MANUFACTURERS INSTITUTE

Good afternoon. My name is Charles Johnson. I am Technical Director of the National Solid Wastes Management Association. Today I am representing the two groups within that association that are most directly impacted by the Resource Conservation Recovery Act of 1976 (RCRA), the Institute of Chemical Waste Management made of firms which transport, store, treat and dispose of hazardous wastes and the Institute of Waste Technology whose members collect solid waste and operate solid waste disposal facilities.

For the past decade, the National Solid Wastes Management Association has campaigned vigorously for a comprehensive and effective federal program to assure the proper management hazardous wastes. As we testified before this committee on April 26, we believe that progress is being achieved, but much more can be done.

We appreciate this additional opportunity to share with the committee our thoughts on changes which might be incorporated in RCRA through legislative amendments this year. As you know, the U.S. House of Representatives will soon consider legislation recommended by its Energy and Commerce Committee which would "shorten the leash" on EPA and force the Agency to act in many areas where there has been more philosophizing than regulating.

To begin, let me address the question of resources. EPA has told you that they can do more with less. We agree. The real question is: Will EPA use its constrained resources more effectively to accomplish more? We appreciate the priority which the Agency has placed on its hazardous waste program. This is an appropriate priority and should be sustained and strengthened by the Congress. On the other hand, we cannot agree with the long-term strategy of EPA to phase out grants to the state governments which EPA has asked to take over the program. It has not been and should not become national policy that state governments be forced to use solely their own resources to implement federal legislation. EPA should not expect to save money through the state authorizing process; it should expect a higher quality product.

Now let me turn next to the points that I wish to discuss today. First on our list of priorities is the so-called small quantity generator exemption. When Congress enacted RCRA, it contemplated a system which regulated the management of all hazardous wastes. EPA was not expected or authorized to create a wholesale exemption merely for administrative convenience. This, however, is precisely what has come about. Under the regulations now in place, any generator of less than 1,000 kilograms per month -- more than one ton -- is completely exempt from any regulatory stricture provided he assures that those wastes are taken to a facility authorized by the state to accept industrial or municipal solid waste.

The practice that this sanctions is unconscionable. Generators are permitted -- even required -- to dispose of hazardous waste by placing those wastes with nonhazardous solid wastes to be taken to a sanitary landfill or a resource recovery facility designed to dispose of nonhazardous municipal solid waste only. The result of this practice has been a series of incidents causing injury to our personnel and damage to our equipment;

- A landfill operator in Oregon was severely burned when his bulldozer ran over a partially filled 25 gallon can of caustic paint stripper causing chemical burns over portions of his body.

- A trash truck in Pittsburgh caught fire when waste chemicals from a high school chemistry laboratory placed for disposal amid nonhazardous waste reacted inside the compactor truck.

- A resource recovery plant in Wisconsin was severely damaged by fire caused by gasoline originally contained in an automotive gasoline tank.

These are the examples of the acute injuries that have resulted from improper disposal of so-called small quantities of hazardous wastes. The environmental insult brought about by the accumulated disposal of small quantities from numerous sources will become apparent only after time has lapsed and waste have a chance to escape from the disposal facility.

Unfortunately, although EPA lacked statutory authority to do so, the agency proposed regulations allowing companies which produced 100 kilograms per month of hazardous wastes to be entirely exempt from regulation under RCRA so long as those generators directed wastes to land disposal sites holding valid state permits. We objected then; we object now. The original proposal of 100 kilograms was broadened, in fact, to 1,000 kilograms under former administrator Douglas Costle. This is the law as it stands. We are presently in U.S. District Court challenging the legality of this regulation. Because the issue is intertwined with several other important hazardous waste management issues, we have asked the Court for a separate, expedited briefing schedule so that this issue may be resolved. We have also petitioned the Agency, but we have never been granted a hearing or response. We have mentioned this concern to this committee not only in our April Testimony of this year but at virtually every similar opportunity over the past two years. Late in the Carter Administration, the EPA announced that in 2-5 years it would reduce the 1,000 kilogram exemption to 100 kilograms. This Administration has shown no sympathy and taken no steps to implement such an improvement.

Merely reducing the exemption to 100 kilograms, however, as we pointed out in our opposition to the original proposal, will neither solve or greatly mitigate the problem. The problem is two-fold: first, hazardous wastes which are placed, without notice, in the midst of conventional solid wastes and handled by refuse haulers and landfill and resource recovery operators as if they were conventional solid wastes present severe occupational risks to workers. These risks are beyond the control of their employers. Second, disposal of exempt quantities of hazardous waste in conventional sanitary landfills without notice to the operator of the landfill is risky because the landfill design or operation may not be sufficient to mitigate the hazardous qualities of the waste with consequent environmental threat. Furthermore, even with assurances by state regulatory agencies that certain hazardous wastes can be safely disposed of in conventional sanitary landfills, it is not the state government but rather the private company or municipal agency which operated the landfill which becomes liable for the environmental performance of that facility not the state government . For government to encourage the unknowing disposal of hazardous waste in sanitary landfills is unthinkable.

In this respect, the proposal before the House does not go nearly far enough. The House bill would require that the present 1,000 kilogram exemption be reduced to 100 kilograms within the next 18 months. That is EPA's announced intention already. The House bill also authorizes EPA to establish a different and presumably less stringent regulatory scheme for generators producing between 100 kilograms or 1,000 kilograms per month. If Regulatory Flexibility is intended, it is incumbent upon Congress to establish the minimum standards acceptable to assure that all quantities of hazardous wastes are disposed of safely. Although the language of the House Committee report suggests a relatively stringent regulatory scheme for small quantity generators, the language of the bill itself might be misinterpreted to suggest that wastes in the 100 kilogram to 1,000 kilogram class could be handled much as they are today and merely directed to properly licensed Subtitle C or Subtitle D facilities, that is conventional sanitary landfills. Should EPA choose this construction of the language, there would be absolutely no diminution of the substantial threat which presently threatens solid waste collection and disposal companies and their public agency counterparts.

Worse still, wastes produced by generators of less than 100 kilograms per month would be totally unregulated. The House bill provides EPA with the statutory authority to grant such an exemption and would totally preempt our court challenge to such a small quantity exemption.

Many states have recognized this gap in the protection of the federal regulatory scheme and, under the authority of RCRA, adopted more stringent rules reducing or eliminating this small quantity generator exemption. Mr. Chairman, your State of Rhode Island is among those states which have successfully eliminated this exemption. Some of the other states which impose tighter standards than the federal rule include Illinois, South Carolina, Virginia, New York and Oregon.

If there is a single substantive amendment which the Senate will adopt this year to modify RCRA, it should be the elimination of the small quantity exemption. The House bill is a start. Our need to receive information concerning the existence of hazardous wastes in the loads placed out for disposal could be met for those quantities under 100 kilograms per month by establishing a statutory requirement that generators provide notice of the existence of the hazardous waste, and the type and quantity of the waste. We would not want to unduly burden small quantity generators, but we must insist that federal regulations not directly endanger our workers or threaten the environmental integrity of our facilities. We strongly urge your attention to this matter.

Our second concern which we also stressed in our April testimony, is that present EPA regulations exempt wastes which are combusted in facilities whose "primary purpose" is other than the destruction of the waste. We believe this is both irrelevant and unenforceable. It matters not the purpose for which the waste is burned, what matters is the environmental consequences of the burning. These wastes should not be exempted from RCRA. The House bill acts to close this loophole; we hope the Senate will act likewise. You should know that this matter has been in litigation for over a year, and we recently withdrew from settlement negotiations because they reached a stalemate. Prompt Congressional action closing this loophole would resolve this issue.

Third, there are a number of other important issues which might be appropriate to address in this legislation. The House bill, for example, would prohibit injection of hazardous waste in class IV wells, require regulations to "minimize the disposal of liquid hazardous wastes and free liquid contained in hazardous landfills," limit expansion of existing hazardous waste facilities under interim status, and mandate an EPA timetable for final permitting of existing hazardous wastes facilities. As the regulated industry, we are here to tell you that our members can accept these requirements. The House bill would mandate that EPA identify which types of hazardous wastes should and should not be deemed suitable for land disposal. We anxiously await a competent study of this matter and support its inclusion in the reauthorization of the Act.

Finally, let me raise an issue that has come to our attention only in the past several days. It is our understanding that the state of Maryland is planning to ask for an exemption from any limitation on the expansion of facilities operating under interim status. The purpose of this is to permit the Maryland Environmental Service, a state agency, to build and operate a hazardous waste dump at Hawkins Point within the city limits of Baltimore. Such an exemption would be unwise for reasons that I will describe. The fact that a state agency would make such a request is symptomatic of a larger issue.

The facility proposed for Hawkins Point is located in a geological setting that is technologically substandard for any type of land disposal. The location is on the shore of the Chesapeake Bay with its fragile ecosystem. The site has a high water table and in fact, construction at the site has actually intercepted groundwater. The subsurface geology consists of clays interlaced with sand lenses, strata that conduct liquids with little or no resistence. A nearby site operated by a generator has been reported by the Maryland Health Department to be leaking acid to such an extent that the public has been barred from 800 feet of shoreline. Would a private operator be granted a permit to build a hazardous waste disposal facility on that site? Would a private firm even apply for a permit to build a facility in such a place? We believe the answer is no to both questions.

The larger point arising from the Hawkins Point proposal is the double standard that can arise when a state acts both as operator and regulator. The federal government went through this experience with the Atomic Energy Commission with sorry results. Now we have states proceeding on a course toward the same mistake. States should not be granted variances for operation of facilities merely because they are to be state-operated. Government operations at any level should be held to exactly the same standards as private operations. This matter deserves close scrutiny by this committee and appropriate action beginning first with a refusal to sanction variances for any facilities, whether publicly or privately operated.

As an industry, we are concerned and anxious, as we told you in our April statement, that the permitting process which will apply the final RCRA standards to existing facilities be expeditiously and competently accomplished. It is critical to the protection of public health and the environment that existing facilities which may not satisfy the final standards be closed. It is essential to our business interests that these "unfair competitors" be removed from the marketplace to establish market conditions which will generate investment in badly needed, modern hazardous waste facilities. Unless we draw the line somewhere, we will always have a chicken-or-egg situation where there will not be enough proper facilities and at the same time, a constant plea that present inadequate facilities be allowed to remain open because of the unavailability of alternative treatment and disposal facilities. It is up to the Congress and to the EPA to make sure that this does not happen.

The preceding panel addressed the question of whether the federal government should establish a system of qualifying private inspectors to supplement the enforcement inspections of government inspectors. While reiterating a strong support for a vigorous enforcement program to assure compliance with hazardous waste regulations, we think adoption of such a scheme would be a very bad idea. Private insurance companies can and do insist that they be allowed to inspect the facility which they have been asked to insure. It takes no federal law for that. On the other hand, regulatory compliance inspections are and should remain a function of government employees. We question whether insurance inspectors have any interest in the full range of procedures that represent regulatory compliance that go far beyond safety concerns. Examples are manifests, recordkeeping, and analysis, all part of the RCRA mandate. We would add that the decision earlier this spring by EPA to require financial responsibility assurances by companies engaged in hazardous waste management requires either that companies place substantial assets at risk, inducing them to minimize that risk by operating a high-quality facility, or, alternatively, purchasing insurance which would invite an insurance underwriter's inspection. We do not believe that it is necessary or desirable to mandate such a system in federal law.

We appreciate this opportunity to appear again before your committee and renew our commitment to work with you and with your staff to ensure a responsible and effective hazardous waste management program.

Thank you.

TESTIMONY OF THE ENVIRONMENTAL DEFENSE FUND
BEFORE THE SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
ON RCRA REAUTHORIZATION

JUNE 24, 1982

Mr. Chairman, Members of the Subcommittee, my name is David Lennett and I am a staff attorney in the Toxic Chemicals Program at the Environmental Defense Fund (EDF). Since 1976, EDF has closely monitored the implementation of the Resource Conservation and Recovery Act (RCRA). EDF filed suit in 1978 to require EPA to issue the RCRA regulations in a timely manner, and since that time has commented extensively on the substance of those regulations. EDF believes a strong RCRA program is essential if we are to improve the nation's waste management practices and thus prevent unnecessary and dangerous exposure to hazardous waste.

This testimony will cover a number of important issues which require your attention as part of the RCRA Reauthorization process.

Permitting Deadlines

To our knowledge, only two hazardous waste facilities in the United States have federally issued RCRA permits - both of which are storage facilities. This statistic is truly disheartening because it is the permitting process in the RCRA program which is the vehicle for making improvements in facility design and performance.

As you are already aware, facilities in existence on November 19, 1980 can continue operating as interim status facilities until such time as EPA initiates a permit proceeding. To qualify for interim status, a facility owner/operator merely had to notify the Agency it existed, fill out a couple of forms, and achieve compliance with interim status standards. The interim status standards are primarily administrative in nature, because they were never designed to be the section 3004 standards necessary to protect human health and the environment. The three criteria EPA used in formulating the interim status standards were:

> 1) Compliance would not require substantial capital expenditures (i.e. retrofitting);
>
> 2) Compliance can be achieved within six month; and
>
> 3) The standards would be simple enough so as not to require substantial interplay with EPA personnel.

45 Fed. Reg. 33159
(May 19, 1980).

The difference between interim status standards and full permitting standards is quite dramatic. For example, the interim status standards merely required incinerator emissions to be visually monitored for their color and opacity, while the full permitting standards require a performance level of 99.99% destruction and removal efficiency. Similarly, liners are not required for land disposal facilities operating during interim status.

It is imperative, therefore, that the permitting process for hazardous waste facilities be completed as quickly as possible so that the necessary upgrading of existing facilities to meet RCRA standards can be accomplished. Almost six years have lapsed since RCRA's passage, yet very few facilities are currently meeting the standards necessary to protect human health and the environment.

EPA has stated previously that permits for these facilities can be issued by 1986 for land disposal facilities and 1988 for all remaining facilities. Because of the critical need to accomplish these goals, EDF strongly supports the concept of legislating these permitting deadlines for hazardous waste facilities. The legislation should not contain an exemption for authorized states, because the deadlines would then not apply to a large majority of facilities currently operating. Such an exemption for the states would undermine the intent of the deadlines by implying that the states need not proceed with permitting in an expedited manner.

EDF believes a permitting deadline provision should contain the following three components:

1) A date by which a facility owner/operator must file a complete permit application to retain interim status. This requirement will screen facilities which are not capable of meeting full RCRA standards;

2) A deadline (or deadlines) for the permitting of *all* hazardous waste facilities after which the operation of a facility without a permit is unlawful (i.e. see 402(k) of the Clean Water Act); and

3) A requirement that EPA report to the Congress annually as part of its budget package, the progress EPA and the states are making toward meeting the permitting deadlines; whether existing resources are sufficient to meet the permitting deadlines; and what additional measures would be required to meet those deadlines if existing resources are insufficient. This requirement should enable Congress to assist the Agency in its efforts to meet those deadlines.

The Role of Citizens in Imminent Hazard Cases

The recent decision of Judge Curtin in *United States v. Hooker Chemical and Plastics Corporation*, No. 79-989C (W.D. N.Y.) raises several issues concerning the role of citizens in imminent hazard cases. These issues are whether citizens have a statutory right to intervene in imminent hazard cases brought by the government and whether citizens can bring their own imminent hazard actions. In this case, organizations representing citizens from an area surrounding the Hyde Park landfill and a nearby property owner sought to intervene in a case brought by the United States against Hooker Chemical Corporation for creating an imminent hazard pursuant to section

7003 of RCRA, and for violating the Clean Water Act, among other allegations. They sought to intervene as a matter of right under both the Clean Water Act and RCRA. Judge Curtin granted their motion as it applied to the Clean Water Act violation but rejected section 7002(b)(2) of RCRA as a basis for intervention as a matter of right in imminent hazard cases brought under section 7003. His reasoning was that intervention is a matter of right under RCRA only in an action brought by EPA for violations of a "permit, standard, regulation, condition, requirement or order" and that an action to seek abatement of an imminent hazard is none or those things. Judge Curtin's ruling applies to intervention applications by states as well.

At the very least, Congress needs to clarify the status of intervention applications in imminent hazard cases, for there are courts which have reached the opposite conclusion and have ruled RCRA authorizes a statutory right to intervene. See United States v. Chemcentral-Detroit Corporation, No. 80-73730 (E.D. Mich.) and United States v. County of Hillsborough, No. 80-1128 (IV-T-H (M.D. Fla.).

Without a statutory right to intervene, intervention as a matter of right must be sought under Rule 24(a)(2) of the Federal Rules of Civil Procedure, which requires the applicant to prove the United States is not adequately representing his interests. This can be a difficult burden to meet since a very strong showing of inadequate representation may be required in cases where it is assumed the United States is representing the public interest. See Wright and Miller, Federal Practice and Procedure, §1909. Permissive intervention may also be sought pursuant to Rule 24(b), but this is a matter wholly within the discretion of the court, and the court may consider the additional time the applicants may require in the litigation as grounds for refusal. In addition, the timeliness of an application for intervention is held to a more rigorous standard if intervention is merely permissive. Id., §1916.

EDF believes Congress should provide citizens and the states an explicit right to intervene in imminent hazard cases under 7003 of RCRA for two reasons. First, as parties with a clear and substantial interest in the outcome of these cases, citizens should not be forced to expend considerable effort at best, or denied an opportunity at worst, to make themselves heard. Second, these highly motivated parties have much to offer in terms of ensuring a quality resolution of these cases. The Hyde Park case is instructive in this regard. The court there noted that the briefs and memoranda filed by the applicants for intervention were "most helpful and informative" and served to convince the court that many questions regarding the proposed settlement decree remained unanswered and many concerns had not been addressed. In the end, the court approved the decree, but only after a complete and fully developed record was compiled.

Judge Curtin's interpretation of section 7002(b)(2) impedes parties other than EPA from bringing their own imminent hazard actions under section 7003 in addition to limiting their rights of intervention. Section 7002(a)(1) of RCRA authorizes citizen suits against any person who is alleged to be in violation of any "permit, standard, regulation, condition, requirement, or order". Applying Judge Curtin's reasoning to Section 7002(a)(1) leads to the conclusion that the citizen suit provision cannot be invoked to abate imminent hazards. It thus limits citizen suits to those concerning enforcement of RCRA regulations or permits only.

We do not believe the role of citizens should be limited in such a fashion. Citizens ought to be able to file citizen suits to seek abatement of an imminent hazard. EPA and the states will not be capable of addressing the universe of imminent hazard sites in an expeditious manner.

When the Superfund priority list expands to 400, EPA's task and the task of the states will increase substantially, especially considering the current policy which prefers enforcement activity over fund-financed response actions. Furthermore, there are a significant number of problem sites which will not make the list of 400.

Citizen suits can perform a valuable supplementary role in filing law suits to obtain clean-ups. For example, EDF recently filed a citizen suit against an owner/operator in Virginia for burning hazardous waste without qualifying for interim status. Because neither EPA nor the State of Virginia wished to apply its resources to enforce RCRA's requirements in this case, EDF filed suit and prevailed in district court. There are other organizations ready and able to assume a similar role concerning imminent hazard cases, particularly the citizens and local governments who are forced to live with these imminent hazards on a daily basis. For example, a group of citizens of Woburn, Mass. recently filed suit against two companies seeking, among other things, the cleanup of leachate originating from the property of those two companies.

The prospect of compensation for the costs of litigation from the responsible party pursuant to section 7002 of RCRA should serve to increase activity in this area.

Facility Inspections and the Role of the Private Sector

There is little disagreement among insurance carriers, the regulated community, EPA, the states, and environmental organizations that adequate compliance monitoring is necessary for an effective RCRA program. The threshold question before the Subcommittee is whether existing compliance monitoring efforts are sufficient for an effective RCRA program.

On September 28, 1981, the General Accounting Office (GAO) released a report entitled Hazardous Waste Facilities With Interim Status May Be Endangering Public Health and The Environment. In that report, GAO stated that in the four regions it examined, EPA and the states had inspected only 12 percent of the 7,056 interim status facilities. In EPA region 3, only 3 percent of the facilities had been inspected. In seeking to explain why more had not been done, Agency officials:

> ... emphasized the lack of staff as a primary factor for the limited number of inspections of facilities with interim status. They further stated that with current levels of staffing and the number of interim status facilities yet to be inspected, it will take years to complete the inspections. Id. at 24.

GAO concluded, "If program staffing and resource needs cannot be obtained in (other) ways (shifting available staff or encouraging the states to do the same), EPA should establish the additional needs of the program and provide such information to the appropriate congressional committees for their consideration."

A credible compliance monitoring program, according to Agency standards, is one which provides for annual inspections of all major facilities (i.e. land disposal facilities and incinerators) and annual inspections of half of the nonmajor facilities. In addition, a credible program should also provide for, on the average, inspections of 20% of the generators and transporters each year (or a visit once every 5 years). Given that there are estimated to be 2136 land disposal facilities, 7858 treatment and storage facilities, and 63,318 generators and transporters of hazardous waste nationwide, approximately 18,729 yearly inspections are currently necessary for a minimally adequate compliance monitoring program.

In 1981, 6250 inspections were performed by EPA and the states. Through May of 1982, about 5400 inspections have been performed. Thus, one can estimate 8100 inspections will be performed in this fiscal year at the current pace. The outlook for improvement in fiscal year 1983 is doubtful. EPA, which was responsible for 1700 of the inspections in 1981 and over 15% of the inspections in fiscal year 1982, has requested only 51.4 Full Time Equivalent (FTE) positions for hazardous waste enforcement in fiscal year 1983, a reduction from 103.1 FTEs in fiscal year 1982. And about one-third of those remaining 51.4 FTEs will be devoted to state program oversight, an important function but not pertinent to the instant discussion. In addition, the Subtitle C grant money to the states may be reduced from over $41 million to about $35 million, should Congress go along with EPA's request. About thirty-five percent of state grant money is projected for enforcement activities.

These numbers form the basis of EDF's opinion that the current inspection program is not minimally acceptable and that likely future resources are inadequate for the task at hand. The Hartford Steam Boiler Inspection and Insurance Company, to its credit, has suggested a solution to part of the problem - the shortfall in facility inspections. EDF believes the Hartford Steam Boiler proposal has some serious shortcomings, however, which will be discussed below. Therefore we do not believe that their proposal represents the optimal solution.

There are two alternative approaches to improving the inspection program under RCRA. One, the approach taken by H.R. 6307, is to authorize and then appropriate additional funds to EPA and/or the states to fill, at least partially, the resource gap. H.R. 6307 authorizes an additional $1.9 million for enforcement activities at EPA.

The other approach, which is the one EDF seeks to advance today, is the use of fees to pay for the compliance monitoring portion of the Subtitle C program. The government would retain the primary responsibility for compliance monitoring but would not rely on general tax revenues to perform this function.

The concept of a fee system for compliance monitoring is not a new or radical idea. In a January 1979 report entitled Hazardous Waste Management Programs Will Not Be Effective: Greater Efforts Are Needed, GAO notes that in 1974 OMB directed EPA to investigate methods to help state programs become self-supporting. At the time, EPA considered a fee system but rejected the concept because of perceived opposition from state and local officials. However, most EPA and state officials with whom GAO discussed the concept in 1978 supported the fee system approach. Id. at 18.

In fact, at least 20 states now have fee systems as part of their hazardous waste management program. Most of the fee systems cover the permit application process costs and do not now cover compliance monitoring costs. However, several states have established fees specifically for compliance monitoring. Two such states are New Jersey and Oregon. New Jersey imposes a $500 per quarter fee on facilities accepting hazardous waste. Oregon requires a $5,000 fee for disposal sites, some of which is for compliance monitoring. In addition, Oregon will implement a compliance monitoring fee system for storage and treatment facilities beginning July 1, 1983. One other state, Arkansas, charges the facility owner/operator in advance on a case by case basis for anticipated inspection costs. In California, Louisiana, and Ohio fees are intended to cover the complete cost of administering the hazardous waste control program, presumably including the cost of compliance monitoring. It should be noted that the fees collected in these programs to date have not been sufficient to fully fund the programs.

There are significant advantages to a fee-based compliance monitoring program, some of which would apply to any similar user fee system:

1) The program will be self-sufficient. Thus resource needs will be addressed and budgetary projections will be stabilized;

2) The cost of the program will be placed upon those entities creating the need for the program. Consequently, the price to consumers of products associated with such entities will more accurately reflect the cost of the product;

3) The program may encourage public confidence because it offers a credible and stable inspection program. This can only help alleviate some of the concerns raised by the public when they are faced with a proposed facility in their community; and

4) A credible inspection program will discourage compliance avoidance within the regulated community, thereby reducing the prospect of recalcitrant companies gaining competitive advantages over the more responsible members of the regulated community.

The fee system should be as simple to implement as possible. We envision a system based on no policy considerations other than the amount of man-hours per year required to inspect a particular type of facility. Land disposal facilities might therefore pay one fee, treatment and storage facilities another, and generators and transporters a third. Combination facilities may necessitate another category. The need for simplicity would argue strongly against attempting to differentiate within classes of facilities based on distinctions such as on-site/offsite, the size of the facility, or the degree of hazard of wastes at a particular facility in setting the size of the fee.

The actual amount of revenue which needed to be collected would determine the amount of the fees. It would be calculated by tabulating the resource needs of EPA and the states for the number of projected inspections necessary to achieve a credible inspection program for that fiscal year. The federal government would be the collecting agent for the fees and would distribute the money to the states according to those resource projections.

Two approaches appear possible for setting the amount of the fee. One is to set the fees in a rulemaking context; the other is to set the fees within the budget process in Congress. The rulemaking option is probably the simpler of the two.

Once the money is collected and distributed, EPA and the states can either hire additional staff to perform the inspections, or they can utilize the expertise available in the private sector on a contracting basis.

EDF's proposal differs significantly from the Hartford Steam Boiler proposal in the relationship between the private sector inspectors and the government. We believe that where the private sector is to be tapped to act as agents of the government, the basis of that relationship should be direct and contractual for the benefit of one party alone - the government.

The Hartford Steam Boiler proposal certifies representatives or employees of insurance companies to do mandatory inspections of the facilities they insure. The inspectors, chosen by the facility owner/operator, would have the authority to negotiate compliance before reporting violations to the regulatory agency. In addition, these inspectors would not be liable for injuries arising from negligent inspections to third parties. Facility owner/operators which self-insure could hire any certified inspector to inspect their facility.

Our strong reservations to the Hartford Steam Boiler proposal come under three general headings: potential conflicts of interest, the need to maintain the independence of the insurance company to make the liability insurance regulations work, and the effect this proposal may have on the ability of the government to conduct its own inspections in the future.

Hartford Steam Boiler does not believe there is a potential conflict of interest problem in their proposal. In their opinion, the interests of the insurance company coincides with the interests of the public. The economic incentive on the part of the insurance company to reduce the number of injury-causing accidents will be sufficient to ensure the integrity of the inspection process. We do not agree for the following reasons:

1) Inspectors of facilities which are self-insured are not at all exposed economically because the facility owner/operator is insuring himself. The owner/operator is free to choose whomever he wants to perform the inspection and can be expected to choose a "cooperative" inspector.

2) The potential liability of insurance companies is limited and apparently not currently regarded by some in the industry as likely enough to require site inspections before insuring a facility. In part, it is the failure of the insurance industry to make inspections a prerequisite for insurance purchasing which has spurred the Hartford Steam Boiler proposal. Therefore it is unlikely that such motivation within the industry will be the reason the process will work.

3) Insurance policies are sold on an annual basis and cover only claims filed within that year. The insurance company can bail out if a problem develops at a facility. The government

and the public do not have that option. In other words, the government has an institutional interest in the facility's integrity; the insurer's economic interest is much more limited -- until closure at best, and at worst, until the end of the year.

4) Non-sudden incidents (i.e. groundwater contamination) happen over a long period of time, unlike boiler incidents which are primarily sudden in nature (i.e. explosions). Therefore, injuries to persons and property arising from non-sudden incidents may occur at a time when the facility is no longer insured by anyone (i.e. after closure) or at a time far enough in the future to allow the insurer to discount his liability over time.

5) All potential violations of the RCRA regulations would not necessarily affect the potential liability of the insurer. For example, manifest requirements are a critical part of the tracking system for hazardous waste management, but from the insurer's point of view, as long as the insured was receiving waste for which the facility was designed, the source of the waste is not necessary information to protect his economic self-interest.

These points are not advanced to impugn the character or the motivations of the insurance industry. They do, however, show that the economic motivation which supports the proposal advanced by Hartford Steam Boiler will not, by itself, provide sufficient confidence to interested parties, including the general public, that industry is adequately policing itself in the hazardous waste management area. This is especially critical because one can foresee that the adoption of this proposal will provide additional justification to those who wish to reduce the budgets of federal and state enforcement efforts still further, thereby debilitating their ability to perform inspections themselves or oversee the inspection efforts of the private sector.

Should the Subcommittee wish to proceed with the Hartford Steam Boiler proposal, or a variation of it, there are at least four modifications which we feel are necessary to make it work.

1) The complete inspection reports filed by the insurer should be public information;

2) Criminal penalties should be imposed upon an inspector for filing a false report (see section 3008(d)(3) of RCRA);

3) Significant RCRA violations should be reported to the appropriate government agency immediately so that the agency can negotiate compliance with the facility owner/operator rather than the insurer or his agent; and

4) A fee system should be developed to ensure that EPA and the states have sufficient resources to oversee and validate the efforts of the private sector. The fees assessed in such a case would be less than the fees in the system we have suggested above since the government would be performing only enough inspections to assess the accuracy of the private inspection.

Another problem raised by the Hartford Steam Boiler proposal - the effect of the proposal on the liability insurance regulations - is much less amenable to correction. After considerable delay, EPA has finally issued liability insurance regulations. These regulations require those owners/operators who cannot qualify for self-insurance to purchase insurance to cover third party injuries to persons or property arising from sudden incidents and non-sudden incidents where applicable. No other RCRA regulation has received the widespread support which accompanied these regulations, particularly after the Agency announced its intent to eliminate the regulations last October. In fact, EPA acknowledged at the press conference announcing the issuance of the regulations that the Agency did not receive one set of comments in favor of elimination.

The different interest groups involved supported the regulations for various reasons. EDF supported the regulations because we believe the insurance industry can play a valuable supplementary role in upgrading existing waste management practices. By requiring some companies to purchase insurance (a large number of companies are likely to self-insure), we sought to enlist the involvement of the insurance industry in locating the problem facilities which would never be able to meet RCRA standards but would continue to operate as interim status facilities as long as that option was available to them, which could be for many years still to come. Either the insurance industry would flag those facilities by not insuring them or they would encourage facility improvements long before government would be capable of doing so.

The concern with the Hartford Steam Boiler proposal is that by cloaking the insurance inspector with quasi-governmental duties, his ability to perform this screening function may be impaired. To a significant extent, the efficacy of the insurance regulations relies upon the confidential nature of the insurer/insured relationship. According to a leading expert in the field, the insured is much more likely to cooperate with the insurer to identify problems and correct them if the information shared by these parties does not go any farther (see letter attached). The insured seeks confidentiality because of trade secret considerations, fear of liability, or potential enforcement action. By forcing the insurance inspector to wear two hats, the Hartford Steam Boiler proposal jeopardizes the confidential nature of the insured/insurer relationship because of the enforcement role played by the insured. The consequence of this breach of confidentiality can be less cooperative insureds, which would undermine one of the principal beneficial byproducts of the liability regulations.

The Small Generator Exemption

The small generator exemption is not a new issue. It has been discussed since the time EPA proposed the general concept of exemptions in December of 1978. The current exemption, which permits hazardous waste generated in quantities of up to 2200 lbs/mo to escape Subtitle C regulation, was designed to be temporary and was justified by the Agency only because of perceived resource constraints, not human health and environmental considerations.

Originally, the Agency proposed a much smaller exemption of 220 lbs/mo. This proposal was severely criticized by many parties as being too lenient. Much of this criticism came from the states, including those states with mature hazardous waste management programs. For example, the California Department of Health Services stated in its comments to EPA on the 100 kg/mo proposal:

> An across-the-board, indiscriminate exemption from full regulation for persons generating less than 100 kilograms per month of any hazardous waste is incompatible with an effective hazardous waste control program....
>
> In California, where such an across-the-board exemption is not allowed, neither an undue administrative burden has been placed on our program nor has an undue economic burden been placed on industry....
>
> The EPA exemption proposal cannot be superficially viewed in terms of gross national percentages or, at the other extreme, in terms of one single generator and one single waste. Rather it should be viewed from the perspective of the impact on solid waste landfills serving many exempt generators. A nonhazardous, solid waste landfill in a heavy industrialized area (e.g., the Sunnyvale Class II-2 landfill in silicon valley, Santa Clara County, California) would receive each month hundreds of loads of such wastes (@ 100 kilograms per month each) from hundreds of large and small firms. Such a landfill could be faced with many tons of hazardous wastes per month unlabeled, uncontainerized, and without warning.
>
> We recommend that by no means the blanket exemption be raised to 1,000 kilograms per month for all hazardous wastes. This would compound the problems and hazards of an indiscriminate exemption by an additional order of magnitude.

Similar comments were filed by Louisiana, Texas and Illinois.

Even states with less developed hazardous waste programs viewed the 220 lb exemption with extreme disfavor:

> The proposed non-requirement of generator, storage and disposal recordkeeping for a generator who produces less than 100 kg/month of hazardous waste is not in keeping with the intended format of safe disposal. I realize it is an economic mitigation but it also allows 100 kg/month of hazardous waste to be buried in a public sanitary landfill to within five feet of the high water table....

Disposing of any really hazardous waste in a community landfill is questionable as to its viability as the final disposal method. There are far too many instances of accidents and community mistrust to legalize such a practice.

Possibly these generators could be allowed to store hazardous waste on their property until it was more economically feasible for bulk disposal. This is an ongoing practice with material destined for recycling. Why should the same generator not be responsible for unwanted, non-profit producing material that poses a hazard to environment well-being?

State of Idaho

The blanket exclusion of persons who generate less than 100 kilograms of hazardous waste per month, and retailers has no basis in fact or reason. This is not to say that we do not recognize the need to exclude the average household from the scope of these regulations. We agree that administrative burdens on small generators, retailers, and farmers should be kept to a bare minimum. We believe that farmers disposing of hazardous wastes are adequately covered by these rules, as proposed. However, small generators and retailers are not adequately covered by the rules as proposed.

State of Connecticut

In Minnesota, initial surveys indicate that the state is not a major generator of hazardous waste compared to other areas of the country. The generators tend to be small, numerous and generate multi-faceted varieties of wastes. To eliminate large numbers of generators with 100 kg/month would amount to a large total volume of hazardous waste being unregulated. The regulation states that small generators may dispose of their wastes in a standard Subtitle D landfill. Again, the accumulation of many small wastes would amount to a large uncontrolled, unmonitored situation.

State of Minnesota

We feel that if the waste being disposed of contains toxic, mutagenic, radioactive, or toxic organic substances in any amount, the producer and disposer of them should be considered a generator of hazardous waste.

State of Virginia

> Wastes such as TCDD (a dioxin) can be extremely hazardous if disposed of in small quantities and therefore require strict controls. Viewing this from a regulatory standpoint we could not in good conscience recommend that small quantities of very hazardous wastes be taken to a local municipal landfill. For example, if a generator should ask us how to dispose of 25 gallons of kepone per month we certainly would not suggest that he send it to the nearest well-run landfill used for residential and commercial wastes, yet that's what the proposed regulations would allow. We cannot produce documented cases where small quantities of wastes disposed of in a municipal landfill have caused environmental or public health problems; probably no one can, however it seems ridiculous to ignore them. Significant public pressure is currently being applied to insure that all hazardous wastes receive proper treatment and disposal. Relaxed requirements for the disposal of even small quantities of extremely hazardous wastes would seem to be counter to the growing public mandate.
>
> State of New York

Many other states echoed these concerns. In addition, the National Governors Association urged that manifest controls be retained for all wastes and that only small generators of wastes exhibiting low level hazards be exempt.

Nevertheless, when the Agency promulgated the final regulations, it did not tighten the proposed small generator exemption but rather expanded the exemption ten-fold. The basis for the exemption cut-off chosen, 2200 lbs/mo, was the perceived shortfall of regulatory resources at EPA and in the states:

> The Agency has concluded that a general exclusion level of 100 kg/mo would provide adequate protection of public health and the environment in most cases but that the exclusion level must be 1000 kg/mo initially because administrative resources are limited....

> To more fully meet the environmental protection requirements of RCRA, however, the Agency will initiate rulemaking within two to five years to phase in expanded Subtitle C coverage of small generators down to those generating 100 kg/mo quantities.
>
> April 28, 1980 Background Document at IV-24.

EDF is not aware of the existance of any new data at EPA or anywhere else which does not support the need to lower the exemption to at least 100 kg/mo to adequately protect human health and the environment. There is new information on the amount of waste generated by small generators, however, which makes the lowering of the exemption even more imperative.

EPA justified its interim choice of 1000 kg/mo on the basis of contractor reports which estimated that only one percent of the hazadous waste generated in the United States would be exempt at that level. However, the Office of Technology Assessment (OTA) has examined and criticized these reports in recent testimony before a House Subcommittee. Specifically, OTA pointed out that the waste generator profile for the nation in those reports was based on data in only 20 states, and no data was obtained from many states which house large numbers of small generators. In addition, the reports failed to take geographic variations into account in compiling a profile of each industrial sector. According to OTA, as much as 10% of the hazardous waste generated in this country may be produced by small generators.

EDF believes a RCRA amendment lowering the exemption to 100 kg/mo represents a necessary first step in addressing the small generator issue. It codifies the Agency's commitment to lower the exemption to a level consistent with RCRA's mandate (100 kg/mo within 18 months). Such an amendment can also provide the Agency with the flexibility to minimize the burden on the regulated community while doing so. We concur with the House Committee Report on H.R. 6307 in this regard:

> The Administrator should consider modifications to the storage, recordkeeping, reporting, accumulations and container requirements so as to conform the administrative burden to the scale of operation. The Administrator may also want to consider modifications such as monthly or quarterly manifest requirements where appropriate.

Federal leadership is warranted regarding the small generator issue. Although many states have taken action on their own to lower the exemption within their borders, some have not because their regulations cannot be more stringent than EPA's by law. EDF has identified 12 states in such a position. Action at the federal levels is therefore required to ensure a minimally adequate national hazardous waste regulatory program.

The Domestic Sewage Exemption

Under current regulations, EPA has completely exempted from RCRA controls hazardous waste which is discharged into a publicly owner treatment works (POTW) via a sewer system. See 40 C.F.R. §261.4(a)(1)(ii). The justification for the exemption is the Agency's interpretation of the term "domestic sewage" in the Solid Waste Disposal Act of 1965. According to the Agency, the term includes industrial waste mixed with domestic sewage. Consequently the term exempts such wastes from RCRA regulation pursuant to the statutory definition of solid waste in section 1004(27) of RCRA.

The Agency has acknowledged that the creation of this exemption was not the ideal course of action. It stated at the time the exemption was created:

> The exclusion of domestic sewage and mixtures that pass through sewer systems to POTWs is based on Congressional intent, not an Agency determination about the relative health and environmental risks posed by such waste streams. The Agency acknowledges that some mixtures of domestic sewage with other wastes may present environmental risks and that some non-domestic wastes may have properties similar to these of exempted domestic wastes. In response EPA can only assume that such factors were not determinative in the Congress' creation of the exclusion.

45 *Fed. Reg.* 33098
(May 19, 1980).

EDF does not agree with the Agency's interpretation of Congressional intent. We believe Congress did not intend to create wholesale exemptions in the RCRA program, but rather intended to require the Agency to integrate the RCRA program with the other environmental programs pursuant to section 1006(b) of RCRA.

Because of the Agency's position on the domestic sewage issue, it has never determined whether the wastes now escaping RCRA controls are otherwise adequately regulated. The Agency does not know the amount of hazardous waste disposed via the sewer system, the numbers of generators utilizing the exemption, or the type of wastes currently disposed in this manner.

Of course, the domestic sewage exemption issue also involves the pretreatment program under the Clean Water Act. Therefore, EPA should seek to integrate the two programs in a manner consistent with the RCRA mandate of protecting human health and the environment. EDF believes that a rational approach for addressing the RCRA-CWA interface should answer the following questions:

1) In the absence of an operating pretreatment program, are there hazardous wastes which EPA should not allow to be dumped down the sewer because of the risks they pose to human health and the environment?

2) Will a functioning pretreatment program adequately cover the full panoply of hazardous waste generators and the complete range of hazardous wastes capable of being identified pursuant to section 3001 of RCRA?

3) Are there hazardous wastes which should not be dumped down the sewer because they are better handled in another manner, with or without a functioning pretreatment program?

The Subcommittee should require EPA to gather the data necessary to answer these basic questions. Once the data is collected, Congress and EPA can determine whether the exemption is appropriate, or whether modifications in RCRA, the pretreatment program, or both are required. EDF also believes that the Administrator should use the notification authority in RCRA to gather the data in an expeditious manner.

Reporting Requirements

In our April testimony, we pointed out that EPA had abruptly suspended three important RCRA reporting requirements: quarterly groundwater monitoring reports, groundwater assessment reports, and annual reports. As a result of litigation we filed, we have been engaged in negotiations with EPA to resolve these issues. In the course of these negotiations, it has become clear that regardless of

EPA's position on these reports, OMB will object, pursuant to the Paperwork Reduction Act, to the reinstatement of the annual reporting requirement. Although EPA has the authority to request a one-time exemption from review under the Paperwork Reduction Act (44 U.S.C. §3507(g)), the Agency is reluctant to use that authority.

The annual reports are the only possible source of crucial information. More than five years after passage of RCRA, we still do not have a good information base or system for determining who generates wastes, the amounts and nature of wastes generated, and where the wastes are going. There simply is no replacement for the annual report to collect and use this important information.

We urge the Subcommittee to address this issue by : (1) mandating that EPA require the submission of the annual report within one month of passage of reauthorizing amendments and (2) providing EPA with a one-time exemption from OMB review under the Paperwork Reduction Act. Through such action, we can at least collect needed baseline information. Debate on whether the annual report should be changed can then take place before the next annual report is due.

Federal Common Law

The federal common law of nuisance is an extremely valuable compliment to the statutory requirements of RCRA, especially for state and local governments. Unfortunately, the Supreme Court in its 1981 ruling in City of Milwaukee v. Illinois, 68 L.Ed.2d. 114 (1981) has put a cloud over its further use.

Keeping the federal common law in place is important for the following reasons: (1) Despite the best efforts of Congress to create a comprehensive regulatory scheme, neither Congress, EPA, nor the states can foresee and immediately fulfill all regulatory needs. Federal common law is necessary to fill the gaps. (2) While Illinois v. Milwaukee appears to have left state common law in place, the federal common law is still necessary, particularly, for instance, where an interstate problem must be addressed.

While we feel that the Court's opinion in Illinois v. Milwaukee can and should be interpreted narrowly, it would be desirable for Congress to dispel any possible confusion on this issue by making clear that the federal common law has not been preempted by RCRA. No new remedies would be created; rather traditional remedies would be preserved. We therefore urge the Subcommittee to address this important issue.

Attorneys Fees

In 1977, Congress amended the Clean Air Act to clarify that attorneys fees were allowed for petitions for review in the Court of Appeals as well as citizen suits in the District Court. We urge the Subcommittee to make a similar clarification in Section 7006 of RCRA. In the last year, EDF has filed or intervened in five Petitions for Review in the Court of Appeals challenging EPA's action. None of these actions is frivilous. Three of these actions, for instance, were necessitated by blatantly unlawful actions by EPA in revoking or suspending RCRA regulations. Yet through a drafting oversight in 1976, we and other parties are not entitled under RCRA to collect attorneys fees for the many hours of legal work we have had to devote to forcing EPA to adhere to the mandate of the law. We urge the Subcommittee to correct this oversight.

Hazardous Waste As A Fuel

The use of hazardous waste as a fuel has merit, since it helps conserve fossil fuels and simultaneously provides a means of destroying toxic chemicals. Any burning of hazardous waste, however, should be closely regulated, because of the potential for incomplete combustion or formation of dangerous byproducts. Despite the need for regulation, however, EPA continues to leave in place a major gap in regulation of hazardous waste. At present, there are no regulations setting standards for boilers or industrial furnaces which burn hazardous waste for energy recovery purposes. An EPA contractor report estimates that approximately 20 million metric tons of hazardous waste are burned every year in facilities such as industrial boilers.

This regulatory gap has been the subject of prolonged negotiations pursuant to litigation involving EPA, chemical generators, chemical treaters and disposers, and EDF. To date, however, EPA has not made a clear commitment to regulate these dangerous facilities. We urge the Subcommittee to address this important issue by: (1) amending RCRA to require those facilities that produce, use, distribute or market fuel containing hazardous waste to report the nature of their activities to EPA and (b) requiring EPA to promulgate regulations within 18 months setting standards of performance for facilities that produce, use, distribute, or market fuel containing hazardous waste.

Thank you for your attention.

RECEIVED

ENVIRONMENTAL DEFENSE FUND

July 8, 1982

Senator John Chafee
Chairman, Subcommittee on Environmental Pollution
Room 4204 Dirksen SOB
Washington, DC 20510

RE: RCRA Reauthorization --
The Domestic Sewage Exemption

Dear Senator Chafee:

As you are already aware, EPA has exempted all hazardous waste which passes through a publicly owned treatment works (POTW) from the hazardous waste regulatory program. The Agency acknowledges that some of the resulting mixtures may present environmental hazards and agrees that the issue merits study. However, the Agency's position, as stated in its testimony before your subcommittee on June 24, is that the information needed to assess the problem has been or will be gathered by the Agency, primarily in its work for the pretreatment program under the Clean Water Act. EPA therefore opposes Section 4 of H.R. 6307 (the House RCRA Reauthorization bill) which requires the Agency to study the exemption to determine the hazards it presents, because they feel it is unnecessary and duplicative.

The Environmental Defense Fund strongly disagrees with the Agency's contention that the Agency currently possesses sufficient information to determine the hazards which the exemption presents. We therefore support Section 4 of H.R. 6307.

There are two major reasons why we feel information already available at EPA is not sufficient: the scope of the pretreatment program is much more limited than that of RCRA, and the information obtained for the pretreatment program is so incomplete that conclusions cannot be drawn from it.

The pretreatment program is concerned with 22 industrial categories of polluters and 129 pollutants which were identified in a consent decree under the Clean Water Act (NRDC v. Train). RCRA classifies over 250 additional chemicals as potentially hazardous for the purposes of its regulations. See Appendix VIII at 45 Fed. Reg. 33132 (May 19, 1980). In

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addition, a recent report written under an EPA contract identifies 63 industrial categories not covered in the Clean Water Act pretreatment program which generate hazardous waste. Over half of these industries report that they use domestic sewers to dispose of at least some of their waste. In fact, EPA's most recent and comprehensive report on industrial discharges to POTWs (hereafter referred to as the JRB report) notes that only 60% of the industrial waste going to POTW's is discharged from "category" industries. It therefore appears that studies done for purposes of the pretreatment program will not be sufficiently broad to cover all the industries and hazardous pollutants of concern in the RCRA program.

In addition, the information obtained for the pretreatment program does not constitute an adequate data base from which to draw any conclusions. The JRB report found that only 64% of the POTW's which receive industrial waste and are large enough to be required to identify the types of industries discharging to their plants had done such a survey. Only 68% of these POTW's monitored the waste stream coming into their plants, and, incredibly, only 12% monitored for toxic metals and only 1% monitored for toxic organics, two major classes of chemicals of concern under RCRA. In fact, the data base on the types and quantities of priority pollutants coming into these plants was so poor that JRB had to base all of its conclusions on "estimates" rather than hard data.

Furthermore, the amendments to the pretreatment program proposed by the Administrator for the reauthorization of the Clean Water Act are designed to increase the use of waivers and exemptions in the program. In light of the findings in the JRB report that the vast majority of the POTW's did their industrial waste surveys because they were required by law, it is likely that even less information will be obtained in the future by this program than generated to date. These changes will further decrease the ability of the pretreatment program to provide either backup information or regulatory control for RCRA.

In conclusion, there is no study currently underway at EPA which is developing a data base that is relevant to problems at the RCRA-pretreatment interface. The House bill would require this study. When the data base has been prepared, sufficient information will be available to Congress and to EPA to determine if a significant hazard exists. If so, a modification of the pretreatment program, the RCRA program, or both would be required.

Sincerely,

David Lennett

David Lennett
Staff Attorney

DL/js

ENVIRONMENTAL RISK ASSESSMENT SERVICE (USA), LTD.

June 21, 1982

Senator John Chafee
Chairman, Subcommittee on
Environmental Pollution
Committee on Environmental and
Public Works
U. S. Senate
4204 Dirksen Office Building
Washington, D.C. 20510

ATTN: Ms. Jo Cooper

Dear Senator Chafee:

I am writing to comment upon a pending proposal amending RCRA Section 3007 to authorize regulatory agency certification of private insurance industry inspectors in such a way that the inspectors' approval of hazardous waste management facilities would constitute agency approval of these sites.

I am very much opposed to the proposal.

The insurance of hazardous waste management facilities against the gradual escape of contaminants is generally termed Environmental Impairment Liability "EIL" insurance. Environmental Risk Assessment Service (USA), Ltd. of which I am president, is in the business of conducting the risk assessment surveys (site visits by engineers followed by risk evaluations and reports) upon which the underwriting of the oldest and most active of the EIL insurance programs is based. This is the so-called "London Pool," organized and managed by ERAS (International), Ltd. a wholly owned subsidiary of the Clarksons Puckle Group, Limited, of London. I have supervised this risk assessment program in this country since EIL insurance was first made available under this program in the United States in 1974. During 1981 alone Environmental Risk Assessment Service (USA), Ltd carried out assessments of 123 different companies engaged in a variety of different industrial and commercial activities all seeking EIL insurance.

(continued Page 2)

From 1974 to 1980 only the London Pool provided this insurance. In 1980 two U.S. insurance carriers entered the market; the following year, three more. In 1982 the Pollution Liability Insurance Association ("PLIA") was formed providing a pool of 39 major insurance organizations, the members of which agreed to provide EIL insurance and to reinsure one another for this coverage. In addition to providing all risk assessments for the London Pool, I am also a member of the PLIA Loss Prevention Committee and a consultant to PLIA.

In the exercise of the foregoing responsibilities I have had more personal experience with more client companies undergoing environmental risk assessment surveys in the course of seeking to qualify for EIL insurance than has any other individual.

A large proportion of the companies seeking this insurance set a very high value on confidentiality. They have two classes of concerns. The first is a desire to protect proprietary process information, a desire that would not be satisfied by legislated assurances of confidentiality. The second concern is to preserve the confidentiality of information relating to any environmental problems.

The purpose of the environmental risk assessment is to provide the EIL insurance underwriter with the information needed to judge whether to accept all or part of a particular company as an insured risk, to set an appropriate premium, and to impose any conditions of coverage such as remedial programs that may be necessary to make a risk insurable.

In obtaining the needed information the underwriter must rely on information provided by the insured. Insurance contracts typically provide that coverage will exclude any claims arising out of threatening circumstances, knowledge of which was fraudulently withheld from the underwriter at the time the insurance was written. For this reason, the risk assessment surveyors typically question corporate managers closely about environmental problems known or suspected by these managers. Before companies seeking the insurance will make the required disclosures, they typically require the surveyor and sometimes the underwriters to sign pledges of confidentiality. The results of the risk assessment surveys are, at least in our program, released initially only to the insured's management so that the insured may have an initial opportunity to review for any misstatement of fact. Once this step is completed, the insured is deemed to agree that the statement of facts presented in the report is a full statement of the company's known problems. In this process, confidentiality is crucial. Without the promise of confidentiality, the insureds would disclose only what the inspector could see or read from mandetory reporting data. Without more the EIL insurance risk assessment process would be unworkable because it requiresknowledge, particularly about past practices, that can only

(continued Page 3)

be provided through candid exchange between the insured and the surveyor.

The degree of industry concern over the possible release of information disclosed during the surveys is difficult to overstate. We have had client insureds request that we not utilize any surveyor who has ever worked for EPA, out of concern that the surveyor might disclose confidential information through social contacts with current EPA employees. In one case, a chemical company requested we substitute a different surveyor firm from the one we initially selected on the grounds that the engineering firm we had first nominated to do site surveys of the insured company had done consulting for EPA in the past.

Against this background the proposed amendment to RCRA Section 3007 seems poorly conceived. It derives from the experience of steam boiler and fire inspection programs in which the inspection process consists of comparing an item of equipment, structure, or operating procedure with a physical standard or norm with which it is to comply.

I enclose a brochure which describes our risk assessment procedure. As it indicates, the insurance surveyor is seeking to evaluate not merely a physical plant but also the attitudes and effectiveness of management. In contrast to boiler inspection, the EIL risk assessment process depends on an exchange of information and opinion that in many cases does not exist in physical or written form. In addition to process technology, the information may consist of product or raw material mixes former operating procedure, management problems including shortcomings of individual managers, and internal conflicts of opinions. If it is not sought subject to a pledge of confidentiality, it will not be forthcoming.

At the present time EIL insurers play an important role in protecting the public by requiring insureds to take precautions that either reinforce regulatory requirements or exceed them in stringency. Without the confidential information provided by the survey process EIL insurance would become unavailable either by reason of the underwriters' unwillingness to provide coverage without adequate information or because underwriting programs that proceed without such information will soon be terminated by excessive losses.

I regret that the number of interested witnesses exceeded the time available for hearings on the measure, I would have appreciated an opportunity to testify against it. In the event that any further hearings on the matter are scheduled, I would greatly appreciate any chance to appear before the committee in opposition.

Sincerely yours,

Charles C. Humpstone
President

Enclosure
cc: Mr. Leslie Cheek
David Lennette, Esq.

STATEMENT OF JOEL S. HIRSCHHORN
PROJECT DIRECTOR, OFFICE OF TECHNOLOGY ASSESSMENT
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
UNITED STATES SENATE

June 24, 1982

Mr. Chairman and Senators, our testimony will address the issue of the management of hazardous waste from small generators. OTA is currently asking State hazardous waste management officials for information on a number of issues surrounding hazardous waste, including, for example, data on total waste generation, disposal and treatment practices, and policies on small generators. At this time we have preliminary information relating to regulation of small generators by the States and some limited data on the amount of waste from small generators currently exempt from EPA regulations.

The preliminary results of this survey as well as exerpted comments by State officials and associations that are in the record in response to the 1978 EPA proposal of 100 kg/mo cutoff and the final 1980 regulations are given in an Appendix. The following findings are based on the survey results obtained thus far and other available information:

(1) When EPA proposed the smaller cutoff of 100 kg/mo in 1978 the overwhelming response from the States was against any such exemption and many useful alternatives were suggested. The most prevalent comment was that EPA should use a type of degree--of-hazard system to set priorities and justify exemptions. Several industry and government associations also objected to the proposal. EPA's change to the higher 1000 kg/mo cutoff in 1980 was based almost entirely on its contractor reports, whose methodologies and findings OTA has already criticized.

(2) The major concern of the States and other interested parties, intense in 1978, has increased today because of continued information on leaking landfills. The exemption of small generators has led to continuing disposal of much hazardous waste in Subtitle D sanitary landfills which are not designed to contain or destroy hazardous wastes. Many exempt generators can send their hazardous waste to a single sanitary landfill, generally without any records of the extent of the situation, nor warnings of any kind to the landfill operator of the increased risks to workers. State officials appear to be more acutely aware of this problem than EPA is. Moreover, there is concern that many sanitary landfills may require remedial (Superfund) cleanup in the future. About half of the sites on EPA's current interim Superfund priority list were facilities that accepted both hazardous and ordinary solid wastes without any measures used, such as landfill liners, to contain the waste. And this is the case now with countless sanitary landfills.

(3) At least 20 States, including five of the nation's ten largest waste generating states, have either no small quantity exemption, have more stringent requirements with regard to quantity than EPA's exemption, or do not allow hazardous wastes from small generators to be disposed in sanitary landfills. Half of those States that have the same quantity cutoff as EPA have some form of reporting requirement to keep track of the exempted waste and its disposal, or limit disposal options.

(4) A number of States have informed OTA that data on wastes generated from firms producing less than 1000 kg/mo, although far from being complete or precise, exists. However, most States do not have the resources for analysis of the data or development of computer systems for data retrieval.

(5) A number of States have limited data on waste generated from those producing less than 1000 kg/mo or are able to make an informed estimate based either on information they have collected or on knowledge of their State industries. The attached table summarizes the available information. For those States providing

estimates, the values of the contribution from small generators (less than 1000 kg/mo) of the total amount of hazardous waste generated vary substantially, from less than one percent to over 10 percent. Most States providing information have estimated that small generators account for over 1 percent of the total amount of hazardous waste generated annually in a state. Sixteen States estimate that the percent from small generators ranges from about 5 to over 10 percent of the total amount of hazardous waste in the state. Six of the nation's ten largest hazardous waste generating States indicate that wastes from EPA exempt small generators is about 5 percent or, in some cases, greater.

(6) Some States have also said that they would probably have developed more stringent regulations concerning small generators if they were not so concerned that such actions might impede final authorization from EPA for them to assume control of their waste programs. Moreover, sixteen States appear to have legal prohibitions against having regulations more stringent than EPA's. Both of these factors explain why, in the detailed findings in the Appendix, a number of States having the EPA exemption have stated publicly that making such an exemption on the basis of some quantity cutoff is undesirable.

Some studies indicate that hazardous wastes transported off the generating site and included in the national manifest system represents approximately 10 to 20% of the total amount of waste generated, although accurate data are lacking. If this range is correct, however, the wastes from small generators exempt by EPA may represent a relatively high fraction of the waste transported to treatment and disposal facilities. A likely range is from 10% (with 1% of the waste from small generators) to 50% (with 10% of the waste from small generators). In States following the EPA small generator exemption regulation without variation, this implies that a relatively large amount of hazardous waste that is transported offsite for disposal may be transported as ordinary solid waste, is not being accounted for in the EPA manifest system, and is being disposed of in Subtitle D sanitary landfills instead of in commercial Subtitle C facilities.

CONCLUSIONS

The above findings suggest a basis for a near term policy concerning the regulation of smaller hazardous waste generators that (1) reduces the quantity cutoff to the 100 kg/mo level originally proposed by EPA; (2) brings more waste generators under regulation so as to minimize use of Subtitle D sanitary landfills for hazardous waste; and (3) provides flexibility to EPA and the States for establishing necessary variations in regulations for smaller generators.

In the long term, however, many States believe that a more effective way to establish variations in level of regulation and control technology, or to select exemptions, is on the basis of some type of degree-of-hazard classification system. Such a system appears feasible eventually, on the basis of preliminary work by OTA and the experience of several States with such systems. However, as EPA has not made a commitment to designing a national degree-of-hazard system, it is not now practible to use degree-of-hazard as a way to decide whether particular wastes should or should not be exempt, even if generated in small quantities. Moreover, the resources provided to the States by EPA have been insufficient to obtain and analyze the necessary data to apply any degree-of-hazard system. It is necessary to bring now exempt small generators into the regulatory system, in those States that have EPA regulations, to form a critically needed data base on types and amounts of waste as well as current treatment and disposal methods. Here too, however, the uncertainty is the level of funding provided to the State programs.

SUMMARY OF ESTIMATES FROM THE STATES ON LEVEL OF WASTE FROM GENERATORS PRODUCING LESS THAN 1000 kg/mo

No Information	About 1-2%	About 5-10%	10% or more
Arkansas*#	California*#	Illinois#	Guam#
Alabama*	Maine	Indiana*#	Kansas#
Colorado	Mississippi	Michigan*#	Massachusetts#
Connecticut	New Jersey#	Missouri#	Minnesota#
District of Columbia	Oregon#	Nevada New York*	Nebraska
Florida*	Pennsylvania++	N. Caroliⁿa	
Georgia*	Rhode Island#	Ohio*#	
Idaho*	Tennessee+++	Oklahoma	
Louisianna#		S. Dakota+	
Maryland*		Texas*	
Montana*			
New Hampshire#			
New Mexico			
N. Dakota#			
S. Carolina#			
Utah			
Vermont*#			
Virginia			
Washington*#			
West Virginia*			
Wisconsin			

* Evidence to indicate that State is against quantity basis for exemption, see Appendix.

States that have more stringent regulations than EPA, have no exemption at all, or forbid unauthorized disposal in sanitary landfill.

+ Estimate of 3-4%

++ Estimate of less than 5%

+++ Estimate of 0.01%

APPENDIX
PRELIMINARY RESULTS OF THE SURVEY AND EXERPTS FROM THE RECORD

The reader is cautioned that although some figures are presented below for the amount of waste generated from small generators now exempt by EPA, such data is often only an informed estimate by a State official and that even when a specific amount is given, the precision is usually not great. All estimates were made by the States and may be susceptible to a systematic error leading to low values because of the inability to determine wastes from very small firms not now regulated, not obeying regulations or not covered in surverys.

Arkansas

Regulation: 1000 kg/mo cutoff but permitted solid waste landfills must obtain a modification to their permit in order to accept exempt quantities of hazardous wastes

Estimated waste from small generators: no information available

Comments on 1978 proposed 100 kg/mo cutoff: "The Department is most concerned that the proposed regulations are not sufficiently sensitive to variations in the types of hazards posed by various wastes and to the degree of hazard posed by various amounts of wastes at any given facility. Because of that lack of sensitivity, the proposed regulations would be unreasonably restrictive in certain situations and unreasonably lax in other situations." - Jarrell E. Southhall, Dir., Dept. of Pollution Control and Ecology, March 16, 1979.

Alabama

Regulation: 1000 kg/mo cutoff, but with a reporting requirement

Estimated waste from small generators: no information avilable

Comments on 1980 1000 kg/mo cutoff: "We have taken the position that we cannot permit 1000 kg of any but the most innocuous of hazardous wastes to go to any of our sanitary landfills. In the first place, there are many small generators, and it would not take many such to require a landfill to be sited and permitted as a secure hazardous waste facility. We do not forsee this as either posssible or practible. In the second place, we see the unloading of the small generator's wastes on sanitary landfills as being an unfair imposition on them." - Alfred S. Chipley, Dir. Div. of Solid Waste, Sept. 30, 1980.

California

Regulation: no exemption for small generators

Estimated waste from small generators: generators below 1000 kg/mo account for probably less than 1% of state total; more than 50,000 small generators

Basis for estimate: apparently an informed judgement without having actual data

Comments on 1978 proposed 100 kg/mo cutoff: "An across-the-board, indescriminate exemption from full regulation for persons generating less than 100 kilograms per month of any hazardous waste is incompatible with an effective hazardous waste control program. ...a superficial consideration of the gross volumes involved is inadequate. Many of the low volume industrial waste are also the most hazardous. Only a few ounces of some wastes (e.g., Class A explosives) if not properly managed, could severely injure persons. It is inconceivable that the delivery of extremely dangerous wastes to minimally-controlled municipal landfills with no identification or warning to the operators could be allowed by EPA. A nonhazardous, solid waste landfill in a heavy industrialized area...would receive each month hundreds of loads of such [exempted] wastes...from hundreds of large and small firms. Such a landfill could be faced with many tons of hazardous wastes per month unlabeled, uncontainerized, and without warning. ....the [California] permitting program has been a bearable administrative burden on our program and has not unjustifiably raised costs to industry in view of the protection afforded to waste handlers and the environment." - California Dept. of Health Services, March 5, 1979.

Colorado

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no information available

Connecticut

Regulation: 1000 kg/mo cutoff; reporting to start next year with annual reports and hauler permit program

Estimated waste from small generators: no information available

District of Columbia

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no information available

Florida

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no information available

Comments on 1978 proposed 100 kg/mo cutoff: "...we feel that certain extremely dangerous wastes should be listed and that any quantity of such wastes should be listed and that any quantity of such wastes fall within Subtitle C requirements. This wouldn't involve an extensive classification of hazardous wastes by degree of hazard, but would only classify those extremely dangerous wastes which there is comprehensive data as to their degree of hazard." Howard L. Rhodes, Dep. Dir., Div. of Envir. Programs, March 13, 1979.

GEORGIA

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no information available

Comments on 1978 proposed 100 kg/mo cutoff: "This provision, by exempting all hazardous waste from Subtitle C controls, could result in some highly toxic or dangerous wastes necessitating careful handling even at a Subtitle D facility, escaping adequate regulatory control. Also, administration of such an exemption would be difficult since burdensome verification of generation rates would be necessary to prove violations. Recommendation: ...allow the Regional Administrator to declare, as hazardous, smaller quantities than 100 kilograms per month of "highly toxic or hazardous wastes." - J. Leonard Ledbetter, Dir., Envir. Protection Div., April 6, 1979.

Guam

Regulation: 200 kg/mo cutoff; manifest for off-island disposal

Estimated waste from small generators: generators below 1000 kg/mo account for 10.5% of total

Basis for estimate: data from manifests for generators between 200 and 1000 kg/mo, and estimates for any others

Idaho

OTA informed that State has insufficient resources to provide any information.

Comments on 1980 1000 kg/mo cutoff: "The impact of exempt amounts of hazardous wastes is of much concern to us for several reasons. In our state, under the present exemption limits, there will be very few generators which are controlled under Subtitle C. For all practical purposes the major problem still remains with the municipal landfills which will continue receiving hazardous waste. By decreasing the Subtitle D funding and not providing relief in the related required efforts, EPA is encouraging misuse and making the situation worse. Either the Subtitle D funds should be increased or Subtitle C funds should be allowed to be used in monitoring the municipal landfill operations and giving guidance and assistance in properly managing the exempt wastes." - Howard L. Burkhardt, Div. of Envir., Oct. 8, 1980.

Illinois

Regulation: 100 kg/mo cutoff with reporting requirement, and does not allow exempt generators to dispose of their waste in Subtitle D facility

Estimated waste from small generators: generators below 1000 kg/mo account for about 5% of state total

Basis for estimate: examination of one month's manifest and compliance data

Indiana

Regulation: 200 kg/mo cutoff, with annual reporting requirement for generators in 200 to 1000 kg/mo range, and waste from generators between 200 and 1000 kg/mo going to approved sanitary landfills (there is currently an initiative to use the 1000 kg/mo cutoff because of public pressures associated with the knowledge of such hazardous wastes going to only three approved landfills, even though use of the upper limit will lead to unknown amounts of hazardous wastes going to many sanitary landfills)

Estimated waste from small generators: generators below 1000 kg/mo account for closer to 10% of state total

Basis for estimate: from unfinished annual report and industrial characteristics of state

Comments on 1980 1000 kg/mo cutoff: "Because of this funneling effect towards municipal solid waste landfills, it is very likely that some of these facilities will become overloaded with hazardous wastes. Consider the scenario of a single municipal solid waste landfill serving a large ge[illegible]aphical area with many small quantity generators. It is po[illegible]ble that the total of small quantities of hazardous wastes [illegible] many small generators could represent a large percentage of [illegible] total waste stream disposed of at the facility. The ration[illegible]le that small quantities of hazardous waste are acceptably disposed of when mixed with large quantities of solid waste fails in this scenario. ...the landfill owner and operator are accepting the high physical and financial risks associated with hazardous wastes without corresponding knowledge or compensation for such increased risks." - Gary F. Lindgren, Indiana State Board of Health, Oct., 1980.

Kansas

Regulation: adopted 1000 kg/mo regulation but manages 100 to 1000 kg/mo generator range as if fully regulated; with reporting requirement and disposal authorization number

Estimated waste from small generators: generators below 100 kg/mo account for 10 to 20% of state total

Basis for estimate: data management system (70 small generators) and 1977-78 State survey

Louisiana

Regulation: no small generator exemption

Estimated waste from small generators: no information available

Maine

Regulation: 1000 kg/mo cutoff but those below must manifest waste for disposal

Estimated waste from small generators: generators below 1000 kg/mo account for slightly over 2% of state total (about 30,000 gal/yr)

Basis for estimate: 1980 state survey response

Maryland

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no information available

Comments on 1978 proposed 100 kg/mo cutoff: "It is recommended that EPA *not* extend a quantity exemption to all wastes. An expert panel should be established to determine those substances for which there should be no exemption." - Arnold Schiffman, State of Maryland, Water Resources Admin., Feb. 22,23, 1979.

Massachusetts

Regulation: 1000 kg/mo (becoming 20 kg/mo on July 1, 1982), but all generators must manifest shipments and must obtain an EPA ID number

Estimated waste from small generators: generators below 1000 kg/mo account for as much as 25% of state total

Basis for estimate: 1980 state study, but nature of data uncertain

Michigan

Regulation: 100 kg/mo cutoff

Estimated waste from small generators: generators below 1000 kg/mo account for closer to 10% of state total

Basis for estimate: high degree of certainty using manifest data

Comments on 1980 1000 kg/mo cutoff: "[There is a] need to get additional waste into the system. Nationally, we have to reduce the hazardous waste which is going to sanitary landfills and other disposal facilities because of the small quantity exemption. 1000 kg/month is not a small quantity for all the wastes listed." - Delbert Rector, Chief, Environmental Services Div., June 10, 1982.

Minnesota

Regulation: no small generator exclusion, with reporting requirement including disclosure of hazardous waste inventory and manifest

Estimated waste from small generators: generators below 1000 kg/mo account for between 10 and 20% of state total,

Basis for estimate: assessment of Hannepin County in testimony before Legislative Committee to Review Administrative Rules

Mississippi

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: generators below 1000 kg/mo account for closer to 1% of state total because of presence of several large generators; 95% of state's waste from three companies, therefore small generators account for about 20% of remainder

Basis for estimate: no actual generation data, but knowledge of state firms

Missouri

Regulation: 100 kg/mo cutoff

Estimated waste from small generators: generators below 1000 kg/mo account for about 5% of state total (32,000 metric tons), with 700 generators greater than 100 kg/mo and less than 1000 kg/mo

Basis for estimate: actual data from regulated firms

Montana

Regulation: 1000 kg/mo cutoff as EPA

Estimated waste from small generators: no information

Comments on 1978 proposed 100 kg/mo cutoff: "The exemption for generators of 100 kg per month is at the same time inadequate for low-hazard wastes and excessive for highly hazardus wastes. The need for criteria which recognize waste quantity, type of hazard and degree of hazard is especially evident in the consideration of management of small quantities of hazardous waste. [Recommendation] Change the quantity exemption to 1000 kg/mo, and:

Alternative A - allow authorized states to control generators of quantities less than 1000 kg per month.

Alternative B - defer control over generators of less than 1000 kg per month until reasonable standards can be developed which regulate these wastes based on waste quantity, type of hazard, and degree of hazard (i.e. waste constitutents and concentrations). Control of quantities less than 1000 kg could be phased in over a period of 5 years from the date the Subtitle C regulations became effective." - Benjamin F. Wake, Administrator, Envir. Sciences Div., Dept. of Health and Envir. Sciences, March 16, 1979.

Nebraska

Regulation: 1000 kg/mo with plan to require annual reporting for small generators

Estimated waste from small generators: generators below 1000 kg/mo account for estimated 10% of state total

Basis for estimate: no actual generation data, but knowledge of state firms

Nevada

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: generators below

1000 kg/mo are estimated to account for closer to 10% of state total; bulk of generators are small generators

Basis for estimate: no actual generation data, but knowledge of state firms

New Hampshire

Regulation: 100 kg/mo cutoff

Estimated waste from small generators: most of industries generate between 100 and 1000 kg/mo, but no data available

New Jersey

Regulation: 100 kg/mo cutoff

Estimated waste from small generators: generators below 1000 kg/mo account for 8.5% of state waste that is manifest; this probably implies that for both waste handled on site (not manifested) and offsite the contribution from such small generators is between 1 and 2%

Basis for estimate: preliminary manifest data for quarter from generators with history of producing less than 1000 kg/mo in previous year; small generators were 21% of manifests handled

New Mexico

Regulation: no exemption at present, but 1000 kg/mo cutoff due October 1, 1982

Estimated waste from small generators: no available information

New York

Regulation: 1000 kg/mo for manifest; but above 100 kg/mo there is reporting requirement to justify exemption and must dispose at and notify approved facility

Estimated waste from small generators: generators below 1000 kg/mo account for 3.4% of state total according to data and 5% according to informed estimate

Basis for estimate: Federal data in environmental impact statement for 3.4% and knowledge of firms for 5% which is believed to be more correct

Comment on 100 kg/mo proposed cutoff: "Again I would like to emphasize NYS's objection to the small generator exemption. ...Although sufficient data may be lacking which would distinguish among various degrees of hazard, we do know of certain wastes which can be considered highly hazardous and should be regulated...regardless of the quantities produced. Disposal of hazardous waste into a local landfill handling municipal waste should be avoided wherever possible." - Charles Goddard, Dir. Bureau of Hazardous Waste, Feb. 8, 1979.

Comments on 1980 1000 kg/mo cutoff: "Our concern is the environmental impacts which these [exempted] hazardous wastes can cause at sanitary landfills which are not specifically designed to contain these chemicals." - Norman H. Nosenchuck, Dir. Div. of Solid Waste, Oct. 7, 1980.

North Carolina

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: generators below 1000 kg/mo account for at least 6 to 8% of state total and probably closer to 10%

Basis for estimate: familiarity of working with small generators; 500 small generators believed to be larger problem than people know

North Dakota

Regulation: 1000 kg/mo as EPA, but state approval needed for disposal of small generator waste

Estimated waste from small generators: no available information

Ohio

Regulation: 1000 kg/mo as EPA, except no sanitary landfills to take small quantities of hazardous waste

Estimated waste from small generators: generators below 1000 kg/mo acount for estimated about 4 to 6% of state total

Basis for estimate: no actual generation data, knowledge of state firms

Comments on 1980 1000 kg/mo cutoff: "The impact of disposing hazardous waste from many small generators at a sanitary landfill could be severe. The short-sitedness of having the 1000 kilogram per month exemption can be inferred from the U.S. EPA's stated intent to decrease that exemption limit as time goes on." - Donald E. Day, Chief, Office of Land Pollution Control, Oct. 7, 1980.

Oklahoma

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: generators below 1000 kg/m account for closer to 10% of state total

Basis for estimate: inspections and analysis of waste streams

Oregon

Regulation: ranges from about less than 10 to less than 100 kg/mo depending on nature of waste, with quarterly reports from generators between 100 and 1000 kg/mo

Estimated waste from small generators: generators below 1000 kg/ mo account for close to 2% of state total

Basis for estimate: actual data because firms are regulated

Pennsylvania

Regulation: 1000 kg/mo with record-keeping requirement for

5 years to which state has access for exempt generators

Estimated waste from small generators: generators below 1000 kg/mo account for estimated less than 5% of state total

Basis for estimate: no actual data, but knowledge of state firms

Rhode Island

Regulation: no quantity exemption

Estimated waste from small generators: generators below 1000 kg/mo account for about 2% of state offsite total, and probably about 1% or less of state's total waste - see below

Basis for estimate: three month's manifest data (1982); however, State regulates industrial waste oils unlike EPA and, therefore, many generators are above the 1000 kg/mo level that would be below it if only the EPA regulated wastes were considered

South Carolina

Regulation: 100 kg/mo cutoff

Estimated waste from small generators: no available information

South Dakota

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: generators below 1000 kg/mo account for estimated 3-4% of state total

Basis for estimate: inspections and type of industries not yet inspected

Tennessee

Regulation: 1000 kg/mo with reporting requirement for generators between 100 and 1000 kg/mo

Estimated waste from small generators: generators below 1000 kg/mo account for 0.01% of state total (350,000 kg/yr)

Basis for estimate: calculation of size of waste streams

Texas

Regulation: 1000 kg/mo with some reporting requirement for exempted generators

Estimated waste from small generators: generators below 1000 kg/mo account for estimated 5 to 10% of state total,

Basis for estimate: register of industrial generators and notification forms from EPA

Comments on 1978 proposed 100 kg/mo cutoff: "The flexibility proposed in the regulations, by defining generators through arbitrary exclusion of retailers and farmers, setting arbitrary quantity limits.......is unrealistic. These comments are being submitted with the intention of outlining acceptable alternatives that can be incorporated into these existing proposed regulations and materially improve State ability to implementa cost effective hazardous waste management program. This approach involves dividing hazardous waste into subsets, based on the degree of hazard." - Jack C. Carmichael, Dir. Div. of Solid Waste Management, March 15, 1979.

Utah

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no available information

Vermont

Regulation: 100 kg/mo cutoff and notification by exempt generators on the amount of waste and disposal practice applies to all generators; may require annual report

Estimated waste from small generators: no available information

Comments on 1980 1000 kg/mo cutoff: "What the present EPA regulation does is allow those members of the regulated community who have little regard for the environment to accumulate up to 990 kilograms and dispose of that material in any Subtitle D landfill. I find it incredulous that we continue to reward those who flaunt the law the greatest. The only saving grace is that EPA did indicate in the regulations that they would be preceding to a hundred kilogram cutoff in the near future, two to five years. This was sufficient basis to convince our regulated community tht the state should go to the lower cutoff of one hundred kilograms per month." - Richard A. Valentinetti, Dir. Air and Solid Waste Programs, Sept. 25, 1980.

Virginia

Regulation: 1000 kg/mo but with notification

Estimated waste from small generators: no available information

Washington

Regulation: less than 200 kg/mo, and will require inventory like annual reports for exempt generators

Estimated waste from small generators: no available information

Comments on 1978 proposed 100 kg/mo cutoff: "The 100 kg per month cutoff is based upon economic rather than risk related considerations. Worse yet, the proposal ignores concentration.. The agency tries to give the appearance of still regulating less than 100 kg quantities to insure their safe disposal. Without any tracking mechanism, this is just an illusion because real enforcement in this area would be very difficult. How would one prove that such wastes complied with this requirment? EPA justified the 100 kg per month limit because of administrative and monitary constraints. ...[EPA] regulations should have considered classification of waste characteristics as a way of prioritizing wastes and dealing with the worst wastes first." - Tom Cook, Solid Waste Management Div., Dept. of Ecology., March 14, 1979.

West Virginia

Regulation: 1000 kg/mo as EPA

Estimated waste from small generators: no available information

Comments on 1000 kg/mo cutoff: "..there is a near total

Federal dismissal of the municipal waste problem in a snowballing hazardous waste paranoia. Somehow, we need to reach a reasoned balance. EPA has prostituted Subtitle "C" provisions by evading degree of hazard."

Wisconsin

Regulation: 1000 kg/mo with quarterly reports for exempt generators

Estimated waste from small generators: no available information

Comments on 1978 proposed 100 kg/mo cutoff: "Conversatons with several municipalities operating facilities likely to be approved under Subtitle D expressed concerns relating to acceptance of up to 100 kg of many types of hazardous wastes. ...imposition of manifest requirements on small generators without requiring quarterly exception or annual reports would at least allow subtitle D facilities receiving these wastes to screen them in a preliminary manner with assistance of regulatory agencies upon reque t." - John W. Thorsen, Chief, Haz. Waste Management Div., and Robert M. Krill, Director, Dept. of Natural Resources, March 15, 1979.

Comments by asso iations on 1978 proposed 100 kg/mo cutoff:

National Governors Association, March 12, 1979

"This provision, by exempting all hazardous waste generated in quantities less than 220 lbs/mo, from Subtitle C controls, could result in some highly toxic or dangerous wastes necessitating careful handling even at a Subtitle D facility, escaping adequate regulatory control. Also, administration of such an exemption would be difficult since burdensome verification of generation rates would be necessary to prove violations. ...The first alternative recommendation corresponds to...reducing the administrative burden of reporting for small generators by retaining manifest requirements [only]...adequate regulatory control would be provided for all hazardous waste. ...(Alternative No. 2) Rewrite ...to make the exemption conditioned on the degree of hazard and/or type of hazard presented by certain wastes. The requirement should be constructed so as to include highly hazardous and toxic wastes in the Subtitle C regulatory program."

National Solid Wastes Management Association, Feb. 20, 1979

"The exemption for generators of ...100 kilograms per month or less is unacceptable. ...EPA could have avoided this problem had they chosen to classify wastes by degree of hazard. Given that they did not, here is what we face. Many hazardous wastes, dioxins and PCB's for example, are hazardous in quantities orders of magnitude less than 100 kilograms. The exemption thus violates EPA's mandate under RCRA to protect public health and the environment. We urge tht EPA remove the 100 kilogram per month exemption at least for the most hazardous materials. Furthermore, we ask that the regulations include a requirement that a generator notify the waste management facility operator when any hazardous wastes are disposed of."

Chamber of Commerce of the United States, March 16, 1979

"...the degree of hazard should determine the extent to which it should be controlled. ...we suggest that a lesser degree of control for wastes that are less than "hazardous", but which may pose more of a problem than municipal solid wastes. A classification system, as has been proposed by other large trade associations, would be an appropriate mechanism for controlling such substances to the appropriate extent.

One of the most serious deficiencies in the proposal is the arbitrary exemption of 100 kilograms per month. This amount is too little to be a meaningful exemption and should be raised to at least 1000 kilograms to be realistic. This suggestion especially applies to hazardous wastes which pose a lesser degree of hazard."

American Petroleum Institute, March 28, 1979

"EPA has failed to differentiate among relative degrees and types of risk, which results in a scheme of regulatory control requirements that make no adjustment for the level of hazard involved."

CMA

CHEMICAL MANUFACTURERS ASSOCIATION

ORAL STATEMENT OF

WILLIAM P. MOORE

OF ROHM AND HAAS COMPANY

ON BEHALF OF

CHEMICAL MANUFACTURERS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT & PUBLIC WORKS

UNITED STATES SENATE

ON

RCRA REAUTHORIZATION

June 24, 1982

2501 M Street, NW • Washington, DC 20037 • Telephone 202/887-1100 • Telex 89617 (CMA WSH)

My name is William P. Moore. I am an environmental specialist for the Rohm and Haas Company and am testifying on behalf of the Chemical Manufacturers Association. I serve as a member of CMA's RCRA Regulations Task Group. CMA is a non-profit trade association whose company members represent more than 90% of the productive capacity of basic industrial chemicals within this country.

A representative of CMA testified before this Subcommittee on April 26 and urged reauthorization of the Resource Conservation and Recovery Act without amendment. Since that date, the House Energy and Commerce Committee has reported H.R. 6307, containing several potentially significant amendments to RCRA. CMA welcomes this opportunity to address these proposed amendments and to discuss one other proposal -- the so-called Hartford Steam Boiler Amendment that is being considered by this Subcomittee.

Recycle and Reuse

In our April 26 testimony we stressed that recycle and reuse are integral and vital features of modern chemical manufacturing. These practices, which significantly reduce the volume of waste that must be disposed, have increased in response to rising energy and raw material costs. Almost every process involves one or more internal recycle streams. For instance, my own company operates a plant producing over 1400 products; one or more recycle streams are used as substitutes for raw materials in the manufacture of a majority of these products. Accordingly, CMA is very concerned about provisions of H.R. 6307 that may deter recycle and reuse practices and thereby detract from the resource conservation and recovery goals that give RCRA its name.

Section 11 of H.R. 6307 requires the Administrator to promulgate regulations governing "beneficial use, reuse, recyling or reclamation" of hazardous wastes. Regulating as "wastes" all secondary materials destined for recycle or reuse could deter resource conservation and recovery. A good example is a recent experience of my company. A state, which does not recognize EPA's current regulatory exemption for beneficial use or reuse of secondary materials, effectively prevented reclamation of metals from a spent catalyst by requiring the reclaimer to obtain a hazardous waste management permit. The reclaimer chose not to undertake the trouble and expense of trying to obtain such a permit. As a consequence we are continuing to land dispose an otherwise recoverable resource. At the same time, some activities pertaining to reclamation or recycling of secondary materials have been implicated in past incidents involving damage to the environment. Presumably, Section 11 seeks to ensure that EPA regulates recycling or reclamation to the extent necessary to minimize such damage.

CMA is concerned, however, that Section 11 is so broadly stated that it could be construed to limit the Administrator's discretion in crafting regulations that achieve a reasonable balance with respect to these statutory goals. We recommend amending Section 11 to make clear that the Administrator only needs to regulate as necessary to protect human health and the environment by focusing on the types of activities that historically have caused damage to human health or the environment. In doing so, the Administrator should ensure that regulations do not discourage resource conservation and recovery. In particular, Section 11 should make clear that regulations in this area cannot intrude in industrial processes, which often use by-products, sludges or spent materials as ingredients or as substitutes for virgin raw materials.

Section 6 of H.R. 6307 requires notification by persons producing, distributing or burning any fuel derived from hazardous wastes. It also requires promulgation of standards under Subtitle C of RCRA applicable to such persons, as may be necessary to protect human health and the environment. CMA members are currently cooperating in a comprehensive EPA study to determine whether regulation of burning of waste-derived fuels is necessary. We expect that the study will reveal that industrial facilities burn secondary materials as fuel in boilers which achieve high combustion efficiencies and, accordingly, that such burning poses no substantial risk of harm. The language of Section 6 gives the Administrator the flexibility to choose not to regulate such burning. Nevertheless, CMA is concerned about language at pages 19-20 of the House Report that states a presumption that all such boilers are to be regulated as though they were hazardous waste incinerators. We urge clarification in the legislative history of Section 6 to emphasize that the Administrator need not regulate all burning of secondary materials in boilers. Rather, the Administrator should have discretion to target regulation on burning of certain kinds of waste-derived fuels in particular kinds of boilers. Absent such clarification, beneficial reuse of secondary materials in place of conventional fuels may be unreasonably inhibited.

It should be noted that Sections 6 and 11 of H.R. 6307 currently use the term "substances identified or listed under Section 3001" in place of the defined term "hazardous wastes." We believe use of the former term will cause unnecessary and counterproductive confusion. We understand, however, that H.R. 6307 is likely to be amended on the House floor to correct this serious problem.

Other Amendments

Section 3 of H.R. 6307 is directed to EPA's current regulatory exemption of certain small-quantity generators from requirements implementing Subtitle C of RCRA. It establishes a limit of one hundred kilograms per month for such an exemption. CMA supports affirmation of EPA's authority to tailor its RCRA regulations to deal with the special problems faced by small generators. We do not believe, however, that it is necessary for Congress to specify particular quantity thresholds for the small generator exemption. This matter could appropriately be left to the Administrator's discretion.

Section 4 requires EPA to report to Congress on the types and quantities of wastes currently exempted from regulation because they mix with domestic sewage going to publicly owned treatment works (POTWs). This report is to include recommendations whether such materials should be regulated under RCRA. CMA opposes this study as redundant and unnecessary in light of a study currently being conducted under the Clean Water Act by EPA.

Section 7(a) requires RCRA permits to "address any release of hazardous waste" from a hazardous waste management facility "which occurs prior to the date of issurance of such permit." The House Report contains only a single unclear sentence explaining this provision. CMA is seriously concerned about this ambiguous provision. The basis for our concerns is set forth in my written statement submitted for the record. Unless its purposes are made much more clear, Section 7(a) dealing with "releases" should be deleted from H.R. 6307.

Section 9 would establish a National Groundwater Commission. The House Public Works Committee has proposed substantial amendments to both the duties and composition of this commission. CMA prefers the version of Section 9 recommended by the House Public Works Committee to that reported by the House Energy and Commerce Committee. Moreover, CMA recommends that any such commission coordinate closely with the United States Geological Survey and EPA since both of these agencies are currently conducting examinations of groundwater issues.

Section 10 attempts to establish federal common law remedies with respect to possible consequences of hazardous waste management under RCRA, despite the necessary implications for RCRA of the Supreme Court's recent holding in Milwaukee v. Illinois, 451 U.S. 304 (1981). Although Section 10 may have sweeping legal consequences, the House Energy and Commerce Committee held no hearings on its desirability.

CMA urges deletion of this section. The chemical industry has serious and substantial concerns with this provision. These concerns are more fully described in my written testimony, and I urge the members of this Subcommittee to review this testimony.

Section 10 appears to invite suits in federal courts against owners and operators of facilities who are complying fully with applicable RCRA requirements. Inappropriately, it may encourage federal judges to second-guess the difficult technical and policy choices properly made by Congress and EPA in the design and implementation of the RCRA permit program. It could thus impose additional, undefined federal liabilities on such persons. Such open-ended legal exposure could inhibit construction of badly needed hazardous waste management facilities by calling into question the value or utility of RCRA permits. As a result Section 10 could compound the nation's hazardous waste management problem.

"Hartford Steam Boiler" Inspection Proposal

CMA opposes the recommendation of the Hartford Steam Boiler Inspection and Insurance Company for a program of regular inspections of hazardous waste management facilities -- primarily by insurance company employees. My written statement elaborates our reasons for the opposition. In summary they are:

(i) The proposed amendment unduly interferes with the discretion of EPA and states to fashion appropriate procedures for enforcement of RCRA standards;

(ii) The boiler inspection program upon which the proposal is modeled is inappropriate for the much more complex task of assessing hazardous waste management facilities;

(iii) The inspections could jeopardize confidential business information;

(iv) The proposed amendment would create a new bureaucratic entity and require extensive additional rulemaking inconsistent with the regulatory reform objectives of the current Administration and of the Senate; and

(v) The inspection program is not necessary given the scope of currently applicable RCRA regulations including groundwater monitoring and extensive inspection and recordkeeping requirements.

Conclusion

CMA appreciates the interest of this Subcommittee in the amendments pending in the House. For the reasons I stated, we have serious concerns about some of these amendments. We urge the Senate to give these concerns all due consideration during continued deliberations about this important legislation.

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CHEMICAL MANUFACTURERS ASSOCIATION

WRITTEN STATEMENT OF
WILLIAM P. MOORE
OF ROHM AND HAAS COMPANY
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A representative of CMA testified before this Subcommittee on April 26 and urged reauthorization of the Resource Conservation and Recovery Act without amendment. Since that date, the House Energy and Commerce Committee has reported H.R. 6307, containing several potentially significant amendments to RCRA. CMA welcomes this opportunity to address these proposed amendments and to discuss one other proposal -- the so-called Hartford Steam Boiler Amendment that is being considered by this Subcomittee.

Recycle and Reuse: Sections 6 and 11

In our April 26 testimony we stressed that recycle and reuse are integral and vital features of modern chemical manufacturing. These practices, which significantly reduce the volume of waste that must be disposed have increased in response to rising energy and raw material costs. Accordingly, CMA is very concerned about provisions [illegible] H.R. 6307 that may deter recycle and reuse practices a[illegible]eby detract from the resource conservation and recovery goals that give RCRA its name.

Some examples of the industry's recycling practices will illuminate this concern. The chemical industry engages in three general types of recycle and reuse:

(i) The first is basically "closed-loop" recycling where a material is "spent," regenerated and reused within a particular manufacturing process. A readily understandable example is solvent recovery practiced by chemical firms that manufacture paints. Solvents are used both for internal cleaning of manufacturing equipment and as an ingredient in paint formulation. Solvents used in cleaning, after use, are stored in tanks and then reclaimed -- either for renewed use as cleaning agents or in paint formulation. Such reused solvent is never disposed of as a waste, except for the small portion that is contained in "still bottoms" resulting from the solvent recovery process. Regulation of this type of practice intrudes directly into the manufacturing process.

(ii) The second is use of by-products or spent materials from one manufacturing process as raw materials in another manufacturing process operated by the same company. For instance, one chemical company has recently discovered a way to use a by-product acid that previously had to be neutralized and disposed to surface waters. After considerable research the company devised a process to convert the byproduct acid to a product that could be used as a raw material at another plant owned by the company. If the processing and handling of this byproduct were to be regulated under RCRA it is doubtful that it would remain economic to continue this practice.

(iii) The third involves recovery of spent materials or by-products for sale to other manufacturers for use as raw materials or as manufacturing intermediates. A good example is the sale of a caustic wastewater stream from the manufacture of a cellulose polymer to paper mills for use as a raw material for "makeup" in the pulping cycle. This practice reduces surface water discharges and conserves resources that would otherwise be needed both in treating the wastewater stream prior to discharge and in the pulp manufacturing process. Regulation of this caustic material as a hazardous waste would unnecessarily encumber this type of resource conservation and recovery.

Section 11 of H.R. 6307 appears to require the Administrator to promulgate regulations governing all "beneficial use, reuse, recycling or reclamation" of hazardous wastes. The single most difficult problem encountered by the Administrator of EPA has been to achieve a sensible balance between the statutory goals of sound and comprehensive management of hazardous wastes on the one hand, and encouraging resource conservation and recovery through beneficial use, reuse, recycling and reclamation, on the other. As already noted, regulating as "wastes" all secondary materials destined for recycle or reuse could deter resource conservation and recovery. Limiting RCRA jurisdiction only to materials that are discarded or intended for discard might, however, prevent regulation of some activities pertaining to reclamation or recycling of secondary materials that have been implicated in past incidents involving damage to the environment. Presumably, Section 11 seeks to ensure that EPA regulates recycling or reclamation to the extent necessary to minimize such damage.

CMA is concerned, however, that Section 11 is so broadly stated that it could be construed to limit the Administrator's discretion in crafting regulations that achieve a reasonable balance with respect to these statutory goals. Accordingly, we recommend amending Section 11 to make clear that the Administrator only needs to regulate as necessary to protect human health and the environment by focusing on the types of activities that have historically caused damage to human health or the environment. In doing so, the Administrator should ensure that regulations do not discourage resource conservation and recovery. In particular, Section 11 should make clear that regulations in this area cannot intrude in industrial processes, which often use by-products, sludges or spent materials as ingredients or as substitutes for virgin raw materials.

Section 6 of H.R. 6307 requires notification by persons producing, distributing or burning any fuel derived from hazardous wastes. It also requires promulgation of standards under Subtitle C of RCRA applicable to such persons, as may be necessary to protect human health and the environment. CMA members are currently cooperating in a comprehensive study that EPA is conducting to determine whether regulation of burning of waste-derived fuels is necessary. It is our expectation that the study will reveal that industrial facilities burn spent and by-product materials as fuel in boilers which achieve high combustion efficiencies and, accordingly, that such burning poses no substantial risk of harm to human health or the environment. The language of Section 6 gives the Administrator the flexibility to choose not to regulate such burning. Nevertheless, CMA is concerned about language at pages 19-20 of the House Report that states a presumption that all such boilers are to be regulated as though they were hazardous waste incinerators. We urge clarification in the legislative history of Section 6 to emphasize that the Administrator need not regulate all burning of secondary materials in boilers. Rather, the Administrator should have discretion to target regulation on burning of certain kinds of waste-derived fuels in particular kinds of boilers. Absent such clarification, beneficial reuse of secondary materials in place of conventional fuels may be unreasonably inhibited.

It should be noted that Sections 6 and 11 of H.R. 6307 currently use the term "substances identified or listed under Section 3001" in place of the term "hazardous wastes." We believe use of the former term will cause unnecessary and counterproductive confusion. Our concerns are the same as those spelled out in the dissenting views of Congressmen Broyhill, Lent and Lee at pages 40-41 of the House report. We understand, however that H.R. 6307 is likely to be amended on the House floor to correct this serious problem. Accordingly, we do not elaborate our concerns in this respect in this testimony.

Section 3

Section 3 of H.R. 6307 is directed to EPA's current regulatory exemption of certain small-quantity generators from requirements implementing Subtitle C of RCRA. It establishes a limit of one hundred kilograms per month for such an exemption. CMA supports explicit statutory affirmation of EPA's authority to tailor its RCRA regulations to deal with the special problems faced by small generators. We do not believe, however, that Congress should specify particular quantity thresholds for the small generator exemption. This matter can appropriately be left to the Administrator's discretion.

Section 4

Section 4 of H.R. 6307 requires EPA to report to Congress specifying "the types and quantities of . . . hazardous wastes which are exempted pursuant to" EPA's regulations that exclude from the definition of solid and hazardous waste, materials that mix with domestic sewage in sewage systems discharging to publicly owned treatment works (POTWs). This report is to include "recommendations respecting whether or not other provisions of law applicable to such mixtures are adequate to protect human health in the environment" or whether such mixtures should be regulated under Subtitle C of RCRA.

The study required by Section 4 is redundant with a study that EPA is currently conducting under the Clean Water Act of industrial wastes, including hazardous wastes, discharged to sewers leading to POTWs. This study is collecting data regarding the types and quantities of such discharges. It considers the degree of treatment being accorded such wastes prior to discharge. This study is designed to enable EPA to select the soundest national strategy for controlling discharges to POTWs. A particular focus of this study is the compatibility of various toxic wastes with existing POTW operations.

Sections 307 and 402 of the Clean Water Act require the development of local pretreatment programs to control discharges to POTWs. Regulations pursuant to these sections prohibit discharges of pollutants which pass through a POTW or which interfere with its operations. These regulations are in the process of being implemented through adoption of municipal ordinances.

Routine industrial discharges thus are subject to local arrangements designed to ensure that industrial effluents sent to POTWs will not interfere with the POTWs' operations or compliance with NPDES permit requirements. CMA supports the full development and implementation of such local programs in all affected communities. CMA does not support rigid, nationally uniform, categorical pretreatment standards. The scope of pretreatment appropriate in a given instance can best be worked out through consideration of local factors.

For the foregoing reasons, CMA believes that the study required by Section 4 of H.R. 6307 is unnecessary and potentially counterproductive. The subject of industrial discharges to POTWs is being adequately dealt with under the Clean Water Act and a sensible program that tailors pretreatment requirements to local circumstances is in the process of implementation. Beginning a separate study, implying possible additional regulation of such discharges under RCRA, could potentially disrupt the implementation of the Clean Water Act with respect to such discharges.

Section 7(a)

Section 7(a) of H.R. 6307 adds a new Section 3005(g) to RCRA, stating that any RCRA permit shall address "any release of hazardous waste from such facility which occurs prior to the date of issuance of such permit." This provision could be falsely construed to invest permitting officials with virtually unchecked discretion to compel remedial measures with respect to inactive land disposal units, not covered by Subtitle C of RCRA, as a condition of permitting of active RCRA facilities. Regrettably, the Committee Report contains but a single, unclear sentence elaborating this provision. In one important respect, it appears to contradict the language of Section 7(a), thereby compounding the difficulty of interpreting this provision.

Section 7(a) states that "[a]ny permit" issued to an existing hazardous waste management facility must address "any release of hazardous waste from such facility" which occurred prior to issuance of the permit. Thus, under Section 7(a) any responsibilities of the owner or operator of the facility with respect to such prior-occurring releases are to be carried out pursuant to a permit that has been issued and not as a precondition of the issuance of a permit. Nevertheless, the report language incorrectly implies that remediation could be required before a permit issues. It states that an interim status facility must control such pre-permitting releases "within the limits of the permitting standards prior to issuance." (Emphasis added.)

The apparent purpose of Section 7(a) is to affirm EPA's proposed strategy for permitting of existing land disposal facilities, as that strategy was outlined in December of 1981. Under this approach, EPA would require existing facilities to monitor groundwater and, upon detection of contamination by the existing facility, to undertake necessary and appropriate remedial measures. Section 7(a) is intended to make clear that remedial measures may be required under the permit even with respect to a "plume" of contaminants that may have escaped the facility during interim status prior to award of a permit.

EPA has not suggested, and Congress should not imply, that permitting of an active RCRA facility should somehow be conditioned upon an undertaking by the owner or operator of that facility to conduct remedial steps with respect to landfill cells or impoundments at the same site which were closed prior to the effective date of EPA's RCRA regulations, November 19, 1980. Congress has stated a clear intent that such remedial action be carried out under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("Superfund").

Despite the apparent intent of Section 7(a) and the clear intent of Superfund, Section 7(a) may cause confusion because of its use of the terms "release" and "facility." The former is not a usual RCRA term, but rather is a term that appears throughout Superfund. The latter term is defined under EPA's RCRA regulations very broadly to mean "all contiguous land, and structures, other appurtenances, and improvements on the land used for treating, storing or disposing of hazardous waste." In addition, "[a] facility may consist of several treatment, storage, or disposal operational units." 40 C.F.R. § 260.10. Accordingly, where, as is not infrequently the case, inactive land disposal facilities are contiguous to active ones, Section 7(a) could be construed to allow RCRA permit writers to attempt to compel remediation with respect to inactive facilities that should be dealt with, as necessary, under Superfund. Moreover, Section 7(a) could be construed to allow a permit writer to compel remediation with respect to an impoundment "unit" located within the same "facility" as an incinerator "unit" as a condition of permitting the incinerator.

As noted above, the Committee Report fails to clarify these important distinctions. Instead, it strongly implies, contrary to the plain language of Section 7(a), that the effects of past releases are to be dealt with as a precondition to the award of a permit. Unless amended to make its purpose clear, or cogently elaborated in legislative history, Section 7(a) should be deleted from H.R. 6307. Its vagueness and overbreadth may inhibit rather than aid the process of permitting existing facilities within the deadlines required by Section 8 of H.R. 6307.

Section 7(b)

Section 7(b) requires the Administrator to issue regulations limiting to 10 percent any expansion of the design capacity of hazardous waste management facilities enjoying "interim status." Although CMA does not oppose such a limitation in principle, we are concerned that transitional problems may arise, especially with respect to land disposal facilities. These problems may be occasioned by the fact that EPA has not yet promulgated effective regulations for the permitting of such facilities, and once these regulations are in place permit-processing delays of one year or more are anticipated. Facilities wishing to expand by adding well-designed landfill cells in excess of 10 percent of the design capacity originally identified in permit applications may be unable, as a practical matter, to obtain timely permitting. To allow additional flexibility with respect to such transitional difficulties, EPA should be authorized to continue in force its current regulatory provision, 40 C.F.R. § 122.23(c)(2), that allows permitting officials to approve increases in design capacity of interim status facilities upon a showing of lack of available capacity at other hazardous waste management facilities.

Section 8

Section 8 establishes a four-year deadline for permitting of existing land disposal facilities and a six-year deadline for permitting of all other hazardous waste management facilities. The House Report at page 21 states that for purposes of Section 8 the term "land disposal facility" is to include incinerators. Incinerators are treatment, not disposal facilities. Accordingly, to avoid confusion, we recommend that

Section 8 be amended to set a four-year permitting deadline for land disposal facilities and incinerators.

Section 9

Section 9 establishes a "National Groundwater Commission" to conduct a four-year study of groundwater issues and to report to Congress with "its recommendations for such legislation, and administrative actions, as it considers appropriate." While we support the concept of examining the nature and scope of contamination of the nation's groundwater resource, we have serious concerns about the scope of the proposed study and the composition of the Commission as set forth in H.R. 6307. Amendments to be proposed by the House Public Works Committee remedy some of our concerns -- especially with respect to the scope of the proposed study. If there is to be such a Commission it should be charged to work closely with the United States Geological Survey and EPA since both of these agencies are currently conducting examinations of groundwater issues.

Section 10

Section 10 of H.R. 6307, although it amends only one word of the Resource Conservation and Recovery Act, makes a change of potentially dramatic and sweeping consequence. As the House Report makes clear, by substituting the term "Act" for "section" in Section 7002(f) of RCRA preserving other common law and statutory remedies, H.R. 6307 seeks to circumvent a recent, well-considered judgment of the Supreme Court, Milwaukee v. Illinois, 451 U.S. 304 (1981). There the Court held that the Clean Water Act had preempted any federal common-law nuisance remedy available to the State of Illinois in a suit against the City of Milwaukee regarding discharge of sewage into Lake Michigan. In reaching its holding the Court rejected a contention that a "savings clause" of the Clean Water Act similar to Section 7002(f) preserved federal common-law remedies after enactment of comprehensive, federal clean water legislation. A strong implication of the Committee's action, thus, is that it wishes to encourage suits in federal courts against owners or operators of hazardous waste management facilities even though they may be in full compliance with all applicable standards, regulations or requirements or orders issues pursuant to RCRA.

The notion of a federal common law of nuisance emerged in the 1970's as federal judges sought to cope with interstate pollution problems that they perceived to be inadequately addressed by existing federal environmental statutes. Illinois v. City of Milwaukee, 406 U.S. 91 (1972) (decided prior to enactment of the comprehensive Federal Water Pollution Control Act Amendments of that year). This decision was a conscious exception to the principle enunciated in Erie R. Co. v. Tompkins, 304 U.S. 64 (1938) that federal courts do not possess a general power to develop and apply their own substantive rules of decision.

When the Supreme Court first acknowledged the availability of such a federal common-law remedy in 1972, the plaintiff was a state that had first attempted to invoke the original jurisdiction of the Supreme Court, the controversy involved unquestionably interstate pollution of navigable waters, and prospective injunctive relief was sought. Illinois v. City of Milwaukee, 406 U.S. 91 (1972). Nevertheless, during the decade between the Court's decisions in Illinois v. City of Milwaukee (1972) and Milwaukee v. Illinois (1981), some federal judges concluded that federal common-law nuisance suits could be brought not only by states but also by private parties, that interstate pollution need not be shown so long as navigable waters were affected, and that monetary damages as well as injunctive relief might be available. See, e.g., City of Evansville v. Kentucky Liquid Recycling Inc., 604 F.2d 1008 (7th Cir. 1979).

In its 1981 decision, Milwaukee v. Illinois, the Court was conscious of the need to stem the tide of such federal common-law actions. The Court stressed that whenever a federal statute governs a particular area, there is a presumption against the existence of federal common law in that area. This presumption is based on a recognition that the power of federal courts is limited under the Constitution. Only in "restricted instances" and as a "necessary expedient" should the federal courts develop such substantive common law in areas where Congress has enacted legislation. 451 U.S. at 313-14. The Court found that in enacting the comprehensive effluent limitations and permitting scheme of the Clean Water Act Congress had intended to extinguish any federal common-law nuisance in the area of water pollution. Two months later in Middlesex County Sewerage Authority v. National Sea Clammers Association, 69 L. Ed. 2d 435 (June 25, 1981), the Supreme Court held that the Marine Protection, Research and Sanctuaries Act of 1972 had similarly supplanted federal common law remedies with respect to oceanic discharges.

Subtitle C of RCRA establishes a comprehensive scheme for regulation of generators of hazardous waste management facilities. This comprehensive regime could fairly be held under recent Supreme Court precedent to supplant federal common-law nuisance actions that might be brought against such persons. The legal and practical significance of the RCRA program could be placed in grave doubt, however, if persons could be subject to suits in federal court, not on the grounds that they are out of compliance with the RCRA regime, but rather that their activities constitute a federal common-law nuisance. Such undefined liability could render the RCRA regulatory process practically meaningless. As the Supreme Court noted in its 1972 decision, Illinois v. Milwaukee, in such federal common-law actions "[t]here are not fixed rules that govern; these will be equity suits in which the informal judgment of the chancellor will largely govern." 406 U.S. at

107-08. Accordingly, such unconstrained legal exposure might inhibit construction of new, more efficient hazardous waste management facilities. Absence of adequate facilities will compound, not cure, the nation's hazardous waste management problems.

Section 10 is an invitation to plaintiffs to request federal courts to second-guess administrative determinations of national policy declared by Congress in enacting RCRA and by EPA in its implementing regulations. Federal courts are not better suited than Congress and the EPA to develop national policy in areas where Congress has enacted comprehensive legislation. The Supreme Court's recent decisions seek to place reasonable limits on such judicial activism.

In RCRA, Congress has set forth a comprehensive scheme requiring owners and operators of hazardous waste management facilities to meet detailed requirements as necessary to protect human health and the environment. The Supreme Court's decision in Milwaukee v. Illinois holds that after similar comprehensive congressional action in the Clean Water Act, the authority of federal courts to develop common law has been extinguished. Section 10, by attempting to repeal the Court's decision in this regard, might subject those who are in full compliance with all RCRA requirements to additional undefined federal liabilities.

Before taking such a serious step, the Congress should fully explore its policy implications and especially the question of whether attempted imposition of such openended liability will genuinely aid the objective of comprehensive and sound hazardous waste management. CMA submits that this provision may hinder rather than aid in the achievement of the objective of RCRA.

"Hartford Steam Boiler" Inspection Proposal

CMA opposes the amendment recommended by the Hartford Steam Boiler Inspection and Insurance Company. This proposal would establish a regular inspection program for hazardous waste management facilities, relying primarily on private-sector inspectors. This program is modeled after boiler inspection programs successfully implemented in 44 states. CMA believes that these boiler programs are not an appropriate model. Safety inspection of boilers is a clear-cut task compared to the broad-scale inspection "as to present and potentially dangerous conditions posed by hazardous wastes" proposed by the Hartford Steam Boiler Company. Moreover, the program upon which the proposal was modeled is one involving optional state implementation and not prescription by federal statute. In fact CMA believes that the proposed amendment would unduly interfere with the discretion of the states, and of EPA, to fashion appropriate procedures for enforcement of RCRA standards.

Further, CMA believes that the recommended program could jeopardize confidential information entitled to protection under 18 U.S.C. § 1905. While Section 3007(b) provides for protection of such information obtained by officers, employees or representatives of EPA, it probably would not apply in the case of representatives of insurance companies who would conduct the inspections required by the proposed amendment. Such inspection would allow private parties to view many of the secret production processes that a company will have developed durng its years of operation. Some of these trade secrets, including those related to process modification, could be noted by an inspector merely by visual observation of the waste tream from the process.

Although the amendment purports to minimize government intervention it calls for the creation of a new bureaucratic entity, the "Hazardous W[illegible]e Facilities Inspection Board" and would require extensive additional rulemaking pertaining to the conduct of inspections. Such rulemaking would have to address extremely complex issues in defining objective criteria for inspections. For instance, such regulations would have to define a "present" or "potential" dangerous condition posed by hazardous wastes. Creation of new bureaucratic entities and the requirement of new rulemaking contradicts the regulatory reform objectives of the Administration and of the Senate.

Finally, the inspection program simpy isn't needed under currently applicable RCRA regulations. Land disposal facilities, which may pose the most significant risks of harm, have in place groundwater monitoring programs that will alert their owners and operators as well as state and federal officials to potential danger. Other facilities such as incinerators must continuously monitor indicators of adequate performance. In addition, EPA's regulations are replete with recordkeeping and inspection requirements to ensure integrity of tanks and containers.

Conclusion

CMA appreciates the interest of this Subcommittee in the amendments pending in the House. For the reasons I stated, we have serious concerns about some of these amendments. We urge the Senate to give these concerns all due consideration during continued deliberations about this important legislation.

RCUD
7-9-82

**API/NFPA
Environmental
and Health
Program**

American Paper Institute
(202) 332-1050
National Forest Products Association
(202) 797-5800
1619 Massachusetts Ave., N.W., Washington, D.C. 20036

July 8, 1982

The Honorable John H. Chafee
Chairman, Subcommittee on Environmental
Pollution
Environment and Public Works Committee
United States Senate
Washington, D.C. 20510

Dear Chairman Chafee:

We appreciated the opportunity to testify before the Subcommittee on Environmental Pollution on possible amendments to RCRA on June 24. At the hearing, the Chemical Manufacturers Association (CMA) witness, William P. Moore, testified against the "Hartford Steam Boiler" Inspection Proposal (copies of excerpts of CMA oral and written testimony are attached for your convenience).

API/NFPA did not receive the Hartford proposal prior to the June 24 hearings. Therefore, the API/NFPA witness, Alan M. Lindsay, did not take a position on the proposal in his June 24 testimony. Since the hearing record remains open until July 9 for the submission of written statements, we take this opportunity to extend our remarks.

A copy of the API/NFPA position on the Hartford proposal is attached. In essence, API/NFPA supports the position and statements of CMA. Please contact me if any additional information is required.

Once again, we applaud the Subcommittee for the careful review given to RCRA issues during the June 24 hearings.

Sincerely,

Michael C. Farrar
Vice-President

API/NFPA Position on "Hartford Steam Boiler" Inspection Proposal

API/NFPA opposes the amendment recommended by the Hartford Steam Boiler Inspection and Insurance Company for a program or regular inspections of hazardous waste management facilities. The concerns of API/NFPA are similar to the concerns expressed by the Chemical Manufacturers Association (CMA) that:

> (i) The proposed amendment unduly interferes with the discretion of EPA and the States to fashion appropriate procedures for enforcement of RCRA standards;
>
> (ii) The boiler inspection program upon which the proposal is modeled is inappropriate for the much more complex task of assession hazardous waste management facilities;
>
> (iii) The inspections could jeopardize confidential business information;
>
> (iv) The proposed amendment would create a new bureaucratic entity and require extensive additional rulemaking inconsistent with the regulatory reform objectives of the current Administration and of the Senate; and
>
> (v) The inspection program is not necessary given the scope of currently applicable RCRA regulations including groundwater monitoring and extensive inspection and recordkeeping requirements.

API/NFPA supports the position of CMA and concurs in the oral and written statements of CMA that are already part of the Subcommittee's June 24 hearing record.

6/24/82
CMA Statement to Senate
Oral

"Hartford Steam Boiler" Inspection Proposal

CMA opposes the recommendation of the Hartford Steam Boiler Inspection and Insurance Company for a program of regular inspections of hazardous waste management facilities -- primarily by insurance company employees. My written statement elaborates our reasons for the opposition. In summary they are:

(i) The proposed amendment unduly interferes with the discretion of EPA and states to fashion appropriate procedures for enforcement of RCRA standards;

(ii) The boiler inspection program upon which the proposal is modeled is inappropriate for the much more complex task of assessing hazardous waste management facilities;

(iii) The inspections could jeopardize confidential business information;

(iv) The proposed amendment would create a new bureaucratic entity and require extensive additional rulemaking inconsistent with the regulatory reform objectives of the current Administration and of the Senate; and

(v) The inspection program is not necessary given the scope of currently applicable RCRA regulations including groundwater monitoring and extensive inspection and recordkeeping requirements.

Written Statement
Submitted by CMA to Senate
6/24/82

the question of whether attempted imposition of such openended liability will genuinely aid the objective of comprehensive and sound hazardous waste management. CMA submits that this provision may hinder rather than aid in the achievement of the objective of RCRA.

"Hartford Steam Boiler" Inspection Proposal

CMA opposes the amendment recommended by the Hartford Steam Boiler Inspection and Insurance Company. This proposal would establish a regular inspection program for hazardous waste management facilities, relying primarily on private-sector inspectors. This program is modeled after boiler inspection programs successfully implemented in 44 states. CMA believes that these boiler programs are not an appropriate model. Safety inspection of boilers is a clear-cut task compared to the broad-scale inspection "as to present and potentially dangerous conditions posed by hazardous wastes" proposed by the Hartford Steam Boiler Company. Moreover, the program upon which the proposal was modeled is one involving optional state implementation and not prescription by federal statute. In fact CMA believes that the proposed amendment would unduly interfere with the discretion of the states, and of EPA, to fashion appropriate procedures for enforcement of RCRA standards.

Further, CMA believes that the recommended program could jeopardize confidential information entitled to protection under 18 U.S.C. § 1905. While Section 3007(b) provides for protection of such information obtained by officers, employees or representatives of EPA, it probably would not apply in the case of representatives of insurance companies who would conduct the inspections required by the proposed amendment. Such inspection would allow private parties to view many of the secret production processes that a company will have developed durng its years of operation. Some of these trade secrets, including those related to process modification, could be noted by an inspector merely by visual observation of the waste tream from the process.

Although the amendment purports to minimize government intervention, it calls for the creation of a new bureaucratic entity, the "Hazardous Waste Facilities Inspection Board" and would require extensive additional rulemaking pertaining to the conduct of inspections. Such rulemaking would have to address extremely complex issues in defining objective criteria for inspections. For instance, such regulations would have to define a "present" or "potential" dangerous condition posed by hazardous wastes. Creation of new bureaucratic entities and the requirement of new rulemaking contradicts the regulatory reform objectives of the Administration and of the Senate.

Finally, the inspection program simpy isn't needed under currently applicable RCRA regulations. Land disposal facilities, which may pose the most significant risks of harm, have in place groundwater monitoring programs that will alert their owners and operators as well as state and federal officials to potential danger. Other facilities such as incinerators must continuously monitor indicators of adequate performance. In addition, EPA's regulations are replete with recordkeeping and inspection requirements to ensure integrity of tanks and containers.

Conclusion

CMA appreciates the interest of this Subcommittee in the amendments pending in the House. For the reasons I stated, we have serious concerns about some of these amendments. We urge the Senate to give these concerns all due consideration during continued deliberations about this important legislation.

AMERICAN COUNCIL ON EDUCATION
Division of Governmental Relations

June 23, 1982

The Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

On behalf of the American Council on Education, an organization representing over 1,500 colleges, universities, and associations in higher education, and the associations listed below, we wish to express our strong opposition to Section 3 of H.R. 6307, which would remove the small generator exemption presently in the Resource Conservation and Recovery Act (RCRA). This provision would require generators of small quantities of hazardous waste to comply with Environmental Protection Agency's (EPA) manifest, packaging, labeling, and recordkeeping requirements.

The higher education community supports the thrust of RCRA in its attempt to provide for the safe disposal of hazardous waste from our campuses. Our concern and support are generated not only by our desire to insure a safe environment for society, but also in our capacity as the instructors of future scientists and doctors who must be taught the appropriate means of disposing of hazardous waste. In an effort to alert our constituents to the regulations promulgated, the American Council on Education mailed a detailed memorandum outlining the requirements of these regulations to our members and has conducted seminars to acquaint the colleges and universities of this country further with the requirements of the law. We are concerned, however, that any present attempt to reduce the small generator exemption that was thoughtfully placed in the regulations would be premature and might cause unwarranted economic and educational consequences for our schools.

We contend that the original rationale of EPA's decision to exempt small quantity generators of hazardous waste is as justified today as when the policy was instituted. The Agency determined that the 1000 kilogram per month cutoff would be the point at which it could most effectively handle the implementation of RCRA. Of the 762,000 hazardous waste generators in the country, 10 percent are responsible for 99 percent of the waste generated. Small generators, on the other hand, comprise 90 percent of the hazardous waste generator population and produce 1.1 percent of the national total. Therefore, concentrating on controlling small volume generators will be of marginal value for the costs involved. Furthermore, eliminating the 1000 kilogram per month threshold may limit EPA's ability to focus limited resources on high priority areas and hamper other important implementation and enforcement efforts.

It is our position that the present set of regulations should be continued for the near term. Operators of hazardous waste disposal facilities and transporters who service these facilities already have adequate means of protection. Agreements with their potential customers can establish the necessary and suitable conditions for packaging, labeling, and recordkeeping which

One Dupont Circle, Washington, D.C. 20036-1193 202) 833-4736

may be required to insure orderly and safe operation of their facilities. Many states, under the encouragement of EPA, are developing their own regulations in this area. Therefore, sufficient safeguards exist for the near term. We are, however, concerned that there will be overlapping regulations which will further confuse small generators in their attempts to meet the requirements of the law. We hope that all reasonable efforts will be made by EPA to insure a uniform system of regulation without excessive and unnecessary burdens to our institutions.

We feel strongly that the present system should be tested prior to any extensive changes in its implementation and that the present exemption for small generators of hazardous waste should be retained for the near term.

Should you have any questions concerning our position, please do not hesitate to call us.

This letter is sent on behalf of:

American Association of Community and Junior Colleges
American Association of State Colleges and Universities
American Council on Education
Association of American Universities
Association of Jesuit Colleges and Universities
Association of Physical Plant Administrators of Universities and Colleges
Committee of Urban Program Universities
Council of Independent Colleges
National Association of College and University Business Officers
National Association of Schools and Colleges of the United Methodist Church
National Association of State Universities and Land-Grant Colleges

Sincerely,

Sheldon Elliot Steinbach
General Counsel

cc: Members of the Subcommittee

SES:gfr

STATEMENT OF THE
AMERICAN IRON AND STEEL INSTITUTE
TO THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
REGARDING THE
RESOURCE CONSERVATION AND RECOVERY ACT REAUTHORIZATION

The American Iron and Steel Institute (AISI) is pleased to submit the following statement of position regarding the Resource Conservation and Recovery Act Reauthorization.

AISI is the principal trade association for the steel industry. Its 64 domestic member companies account for approximately 91 percent of the raw steel production capability in the United States.

The 1965 Solid Waste Disposal Act (PL89-272) was strengthened in 1970 by the Resource Recovery Act (PL91-512) and further strengthed by the Resource Conservation and Recovery Act of 1976 (PL94-580). The titles reflect the growing sophistication of solid waste concerns - from simple disposal to recycling to conservation (cutting down on the amount of wastes generated.)

The steel industry has followed along with this movement in the interest of our environment and the economic benefits experienced through reuse. For example, waste pickle liquor (a hazardous waste product from the steelmaking process) is used by Publicly Owned Treatment Works (POTW) to treat municipal sewage. Also, products which are identified as hazardous wastes are burned for energy recovery. At a time when energy of any description is considered a valuable commodity it appears incongruous that regulations should be allowed to multiply to the extent where reuse is discouraged.

We believe that two sections of H.R. 6307, the House legislation, lessen the incentives to reuse hazardous waste products and make it easier to simply dispose of it.

Regulation of Hazardous Wastes Burned for Energy Recovery

Section 6 of the amended bill contains a subsection titled "Hazardous Waste Used as Fuel." This section would require EPA to regulate the burning of hazardous waste as a fuel. AISI has consistently taken the position that EPA has no authority under RCRA to regulate any burning for energy recovery. Materials recovered and burned for energy recovery constitute a class of useful materials and, therefore, are not properly considered wastes. Furthermore, EPA studies have shown that air emissions from materials otherwise classed as hazardous wastes and burned as fuel in various industrial processes can be more acceptable environmentally than emissions from regulated hazardous waste incinerators. Additionally, EPA has adequate authority under the Clean Air Act to control air emissions from the burning of fuel.

This subsection could significantly disrupt those industries that burn recovered fuel in their facilities. Such an action would provide an incentive for generators to send their materials to an incinerator or disposal site rather than considering them as useful materials from which fuel values can be recovered by burning in industrial processes. In the current climate of deregulation to encourage increased discovery and production of fuels, waste materials with fuel value should not be destroyed when the energy can be used productively. It is not in the national interest to incinerate fuels, that is, to apply energy only to destroy the waste that could otherwise be beneficially used. The burning of wastes in industrial processes results in the recovery of energy that ultimately is used to produce industrial products. In this manner, other energy sources are conserved and energy from waste is recovered. This is consistent with the statutory mandate of RCRA to encourage resource conservation and recovery and the national policy of encouraging the development of alternate fuels.

Regulation of Reused / Recycled Materials

Section 11 of the amended bill, "Beneficial Use of Hazardous Waste," states "the Administrator shall promulgate regulations to insure that beneficial use, recycling or reclamation" of hazardous wastes be conducted in a manner "necessary to protect human health and the environment." Such a section would apparently give EPA the right to regulate as wastes materials which currently are being recycled for a useful purpose.

AISI has always taken the position that Congress did not intend EPA to regulate useful materials being recycled. RCRA was enacted to promote conservation of natural resources by encouraging the recycle, reuse, and reclamation of materials rather than their disposal as wastes. Most industrial manufacturing companies have made sincere, responsible efforts to recycle. Beneficial reuse and recycling have long been practices of the steel industry and are done in a cost-effective manner and in such a way as to enhance and improve the environment while protecting human health. Recycle and reuse of waste materials with material or energy value conserves at least two scarce resources - land and materials with economic value. Regulation discouraging recycle and reuse encourages land disposal. Disposal results in risk to the environment (which EPA rules attempt to limit) and the increased use of land for disposal of hazardous wastes.

The concern is that, if this amended bill were to become law, it would give EPA authority to control these recycled materials anywhere in the industrial process. Existing laws such as the Clean Air Act, Clean Water Act, Toxic Substances Control Act, Comprehensive Environmental Response, Compensation and Liability Act, Hazardous Materials Transportation Act, etc., presently protect human health and the environment. The proposed amendment, by authorizing the regulation of recycled or reused materials under RCRA will result in the wasting of land and of the valuable constituents of substances which may be hazardous if classified as wastes.

Thank you for allowing AISI the opportunity to share our concerns with the Subcommittee.

Statement on Behalf of the
American Petroleum Institute
before the
Senate Public Works Committee
Subcommittee on Environmental Pollution
June 24, 1982

My name is Wendall J. Clark. I am an employee of Texaco Inc. and Co-Chairman of the RCRA Task Force of the American Petroleum Institute. This API group has the responsiblity for assessing the impacts of solid and hazardous waste laws and regulations on the industry and providing input to EPA and other government bodies.

API welcomes this opportunity to reaffirm its strong and continuing support for appropriate management of hazardous wastes and to offer these comments concerning the Senate's proposed reauthorization legislation, as well as the provisions of H.R.6307.

We would like to say at the outset that API strongly supports reauthorization of RCRA without substantive amendments, as in Senate bill S.2432.

As you are aware, EPA has conducted extensive studies in a diligent effort to develop a technically sound and practical regulatory program and is now on the verge of promulgating its final regulations. The complexity of the issues has forced this careful, deliberate development. API is strongly opposed to the concept of legislating the details of what is properly a regulatory program without benefit of adequate study and deliberation. Also, the effectiveness of the entire program hinges on the Agency's having the flexibility to prioritize and to select and address the practices and facilities which pose the greatest potential environmental problems.

Legislative action which will result in a wholesale enlargement of the regulated community to include practices and facilities which have lower environmental impact, could be counterproductive.

Furthermore, the establishment of arbitrary deadlines without any appreciation of the realities of what it takes to accomplish the program goals can only serve to thwart the Agency's efforts.

If unreasonable statutory requirements are enacted, failure by the Agency to meet them will undoubtedly trigger lawsuits which will further divert Agency manpower and serve to place this regulatory development under the control of the Judiciary Branch.

As stated earlier, API is not convinced of the necessity for any of the H.R.6307 amendments but is particularly concerned with Sections 3, 6, and 11, although we have significant problems with other sections as well.

Small Quantity Generators

First, we would like to clear up an apparent misconception over EPA's so-called "small-quantity generator exemption."

Such generators are not actually exempt from the RCRA regulations since they must comply with a disposal program, although it does consist of reduced requirements.

Small-quantity generators are required to send their hazardous wastes to either a RCRA permitted hazardous waste facility, a RCRA facility with interim status, or a facility permitted, licensed, or registered to manage solid waste by the state. Such state facilities must meet strict design requirements under Subtitle D to keep from being classified as illegal open dumps. Furthermore, EPA has established a one kg/mo small-quantity generator limit for acutely hazardous wastes. Therefore, there is a low probability of harm resulting from the reduced requirements for the less hazardous wastes in the 1000 kg/mo category.

API believes that the background document developed by EPA to evaluate the "small quantity generator exemption" is as valid now as at the time the rule was promulgated. That study determined that while the 1000 kg/mo "exemption" excluded 91.2 percent of all generators it embraced only one percent of all waste. The arguments against the "exemption" that were expressed at the House oversight hearings on April 21 fail to consider adequately the concomitant increase in regulatory burden (without significant environmental benefit) and the potential effect on small business operations. One example of the broad-reaching effect of the proposed amendment in Section 3 of H.R.6307 (which reduces the "small quantity exemption" level from 1000 kg to 100 kg) concerns the possible inclusion of as many as 130,000 full-service gasoline stations under the RCRA hazardous waste program.

These service stations generate three materials which may be classified by RCRA testing as hazardous: (1) used oil (including engine oils, transmission fluids, etc.); (2) degreasing solvents; and (3) used batteries. On a monthly basis, a station typically generates more than 100 kg, but less than 1,000 kg of these materials, thereby qualifying for EPA's small-quantity generator exemption. It should be recognized, however, that the largest portion of these materials is oil, which has sufficient value to create an incentive for recycling rather than dumping.

If an operator becomes subject to federal regulations as a generator, he may be required to comply with numerous requirements, including the following: obtaining an ID number; testing wastes; packaging, labeling and placarding; preparation of manifests for each shipment; verification of waste delivery; and securing a permit if material is stored for more than 90 days. In the case of service stations these requirements could be extremely disruptive and counterproductive, causing facilities to refuse to accept used motor oil from customers, thereby discouraging resource recovery and leading to adverse environmental consequences.

API believes that Section 3 is not warranted in view of the potentially far-reaching effects on small businesses, particularly since EPA has stated that 99 percent of all hazardous wastes generated would not be exempt under the current 1,000 kg "exemption" program, and the administrative burden would be unmanageable if all generators were in the system.*

Burning and Blending of Hazardous Waste as Fuel

Section 6 of H.R.6307 requires the EPA to promulgate standards for the burning of any substance identified in Section 3001 of RCRA. API takes strong exception to the use of the word "substance" instead of "hazardous waste." This terminology change would unduly broaden the scope of RCRA beyond the regulation of wastes. In addition, this would disrupt a current rulemaking proceeding which is attempting to define the universe of wastes that are regulated under RCRA.

Another consequence of using the word "substance," spelled out in the legislative background of this section, indicates that used oil is to be regulated when burned. Used oil has already been addressed by Congress in the Used Oil Recycling Act of 1980. EPA has been actively studying the used oils issue since the passage of that Act and is presently performing a regulatory impact analysis of its waste oil regulatory program.* Again we believe that it is inappropriate for Congress to dictate specific requirements. EPA should be allowed to complete its previously mandated regulatory program.

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* API notes that the minority views expressed by some House Energy and Commerce Committee members indicated that this issue should be handled in an EPA rulemaking rather than statutorily. See, H.R.Rep.No.570, 97th Cong., 2d Sess. 39 (1982).

Even if the word "substance" were replaced by "hazardous waste," API would still have objections to this section. EPA should retain the freedom to determine the extent to which the burning of wastes should be regulated so as not to discourage the conversion of waste into energy and not to encourage less desirable forms of disposal. As stated in Section 1002(d)(2) of RCRA: Congress finds with respect to energy, that "the need exists to develop alternative energy sources for public and private consumption in order to reduce our dependence on such sources as petroleum products, natural gas, nuclear and hydroelectric generation. ..." Section 1003 clearly states "The objectives of this Act are to promote the protection of health and the environment and to conserve valuable material and energy resources. ..." Proposed Section 6 of H.R.6307 is inconsistent with the original intent of RCRA.

Beneficial Use of Hazardous Waste

API also objects to the use of the word "substances" rather than "hazardous wastes" in Section 11 of H.R.6307. In this case we are concerned that Section 11 could lead to excessive regulation of reuse/recycle activities, thus further discouraging the conservation of material and energy resources.

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* API has provided to EPA a detailed critique of EPA's report to Congress entitled "Listing of Waste Oil as a Hazardous Waste."

Section 11 of H.R.6307, as broadly as it is written, could force EPA into the unnecessary regulation of a multitude of process-oriented reuse/recycle activities rather than the management of hazardous wastes from these activities. For instance, the processes of rerefining used oil are similar to those in the original refining of that oil, and should not be subject to regulation beyond the panoply of health, safety, and environmental laws and regulations already in place. For example, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) establishes reporting and liability requirements for releases of hazardous substances resulting from any activity, and RCRA controls the wastes produced by the process.

Permits

API objects to the unqualified limitation contained in Section 7 of H.R.6307, which requires permits for facilities to expand more than 10 percent.

The current regulations allow for expansions and modifications during interim status based on findings by EPA that such modification is needed and will not adversely affect public health and the environment. Modifications may be necessary because of lack of capacity at a location and may also be necessary to prevent a threat to human health or the environment. Further, modifications may be necessary in order to comply with federal or state regulations.

API believes that the EPA must have the discretion to allow expansions in excess of 10 percent without going through formalized permitting procedures. This section does not even allow the Agency to authorize modifications based on a finding that the modification is needed and would not adversely affect human health and the environment. The Agency is presently reviewing its regulations pertaining to modifications during interim status. Legislative action should not limit the Agency's discretion.

Timetable for Review of Permit Applications

API objects to the timetable established in Section 8 of H.R.6307, which requires EPA to issue permits for existing land disposal facilities within four years and other hazardous waste facilities within six years.

The issuance of RCRA permits will be a complicated and time consuming process. There are approximately 14,000 facilities which have filed notifications and permit applications (Part A) and are presently operating under interim status which will require permits. API believes that the permitting process must proceed in an orderly, technically sound manner and that the imposition of time limitations has the potential to disrupt the permitting process by allowing challenges to be brought in the event EPA is not able to issue the permits within the time specified.

EPA is currently involved in a number of "deadline" suits because of failure to meet statutory deadlines. The courts have recognized their lack of ability to deal meaningfully with such cases.

These cases only divert the Agency's resources from implementing RCRA and other environmental laws. API agrees with the concept of timely issuance of RCRA permits but strongly opposes this section and the specific setting of time limits.

Groundwater Commission

API objects to the establishment of a National Groundwater Commission specifically under RCRA in view of the broad spectrum of activities which can affect groundwater quality. Nevertheless, we support the concept of creating some mechanism to conduct a comprehensive study of the groundwater resources in the nation. We recognize that the management of the nation's groundwater is of critical concern both to the Congress and the public. However, the technical complexities surrounding the use and protection of groundwater have yet to receive the scrutiny that is a prerequisite to effective action -- whether federal, state or private.

In creating such a mechanism, API stresses that, though of national concern, the issue of groundwater management and protection differs among states and regions. The resolution of various problems dealing with groundwater will inevitably involve issues dealing with land use matters. Such issues are fundamentally regional issues which are appropriately considered from a regional rather than a national perspective. Therefore, we recommend that any study be coordinated at the national level but carried out at the regional and state levels. This will ensure that the vast differences in groundwater conditions will be adequately addressed.

To ensure that the findings of any study will be fair and capable of implementation, API believes that it is necessary to obtain the expertise of industry representatives and members of the scientific and academic communities. Moreover, API favors requiring, rather than authorizing, the use of the U.S. Geological Survey (USGS) in conducting such a study since they have demonstrated a proficiency and understanding of the many uses of and impacts upon groundwater.

Preservation of Other Rights

API opposes Section 10 of H.R.6307 which seeks to assure that RCRA does not supplant other federal law, including federal common law. This change could have significant legal and financial consequences for owners and operators of hazardous waste disposal facilities. It would allow litigants to bring suits against them in federal courts for abatement of a nuisance or damages even though they may be operating in compliance with all applicable standards, regulations or orders issued pursuant to RCRA.

This amendment seeks to countermand the Supreme Court's rationale for its well-reasoned decision in City of Milwaukee v. Illinois, 451 U.S. 304, 101 S.Ct. 1784 (1981). In that case the Court held that the comprehensive water pollution regulatory program created by the 1972 amendments to the Federal Water Pollution Control Act supplanted the federal common law of nuisance.

Ten years ago, in Illinois I, the Court observed that "new federal laws and new federal regulations may in time preempt the field of federal common law of nuisance." See, 406 U.S. 91 at 107 (1972). Last term, in Illinois II, the Court held that the comprehensive regulatory scheme of Federal Water Pollution Control has preempted the federal common law of nuisance. Several weeks later, in Middlesex County Sewerage Authority v. National Sea Clammers Association, 453 U.S. 1, 101 S.Ct. 2615 (1981), the Court reached the same conclusion regarding water pollution regulated under both FWPCA and the Marine Protection, Research and Sanctuaries Act.

The Court's readiness to treat environmental statutes as "comprehensive," and therefore preemptive of federal common law, strongly suggests that RCRA and CERCLA would preempt federal common law with respect to hazardous waste management activities regulated under Subtitle C of the Act. Indeed, the Federal District Court for the State of New Jersey has looked at this issue in U.S. v. Price, 523 F.Supp. 1055 (1981), and decided that federal common law has been preempted by the enactment of RCRA and CERCLA. "The comprehensive nature of the schemes established by RCRA and CERCLA require us to conclude that if federal common law ever governed this type of activity, it has since been preempted by those statutes." Id. at 1069.

The federal courts created the doctrine of federal common law in the absence of federal statutes. The lack of need for the doctrine is unquestionable in light of the extensive statutory and regulatory requirements.

Thus, contrary to the allegations contained in the Committee Report, federal common law has no valid role to play in this area, especially in view of the comprehensive nature of RCRA and CERCLA. Owners and operators of hazardous waste disposal facilities operating in compliance with statutory and regulatory requirements should not be subjected to the threat of federal common law actions for damages or injunctive relief. Further preservation of federal common law is not warranted.

ASSOCIATION
OF AMERICAN
RAILROADS

William H. Dempsey
President

June 23, 1982

The Honorable John H. Chafee
Chairman
Environment Pollution Subcommittee
United States Senate
5229 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Chafee:

This week the Subcommittee on Environmental Pollution will hold hearings on the reauthorization of the Solid Waste Disposal Act. It is the railroad industry's understanding that few changes will be proposed for the Act. In the House of Representatives, however, a bill reported by the Committee on Energy and Commerce (H.R. 6307) included a provision (section 3) instructing EPA to promulgate standards for those generating hazardous waste in monthly amounts of between 100 and 1000 kilograms. The railroad industry strongly opposes this amendment.

Currently, EPA exempts from its hazardous waste regulations those generating less than 1000 kg. of hazardous waste per month. The railroad industry estimates that from four to six hundred railway facilities such as switching yards, fueling facilities, small terminal points, and small repair facilities would be affected by a change in the small generator exception. The wastes generated at these facilities includes oil filters, oily rags, and bearing lubricating pads. These wastes are mixed with paper, floor sweepings, and other trash and disposed of in landfills. The regulation of these small quantities of waste would require the railroads to institute expensive compliance procedures. The "hazardous" wastes might have to be segregated from the other wastes and shipped to RCRA permitted disposal facilities. These railroad facilities might also have to become permitted storage facilities themselves.

The proposed change in the small quantity generator exception would impose significant burdens on the railroad industry without any apparent corresponding benefits. Certainly, there is nothing in the record before the House to show that such benefits exist. We ask that this provision not be included in any bill reported by the Environment and Public Works Committee and that the House amendment be deleted in conference.

Sincerely,

W. H. Dempsey

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CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

HILTON DAVIS
VICE PRESIDENT
LEGISLATIVE AND POLITICAL AFFAIRS

1615 H STREET, N.W.
WASHINGTON, D.C. 20062
202/659-6140

June 24, 1982

The Honorable Robert T. Stafford
Chairman
Committee on Environment and Public Works
U.S. Senate
Washington, D. C. 20510

Subject: Hazardous Waste Act Reauthorization

Dear Mr. Chairman:

On behalf of the U.S. Chamber's more than 240,000 members, I respectfully urge you to consider very carefully the harmful effect on small business if current hazardous waste regulations are expanded to cover generators of small quantities of hazardous waste.

While the Chamber is the largest federation of business and professional organizations in the world, more than 85 percent of our members are small business firms having fewer than 100 employees. Many of these businesses face complex (hence, costly) environmental regulations -- which produce little, if any, environmental benefit -- if EPA's current criterion of "small generators" is changed.

EPA recently testified that existing Resource, Conservation and Recovery Act (RCRA) regulations control 99 percent of the hazardous waste generated in the nation. The Agency believes that the remaining one percent does not constitute any significant environmental problem and allows these small quantity generators to dispose of waste in sanitary landfills.

The Chamber strongly supports the sound environmental management of all wastes and urges strict compliance with RCRA. At the same time, we advocate the prudent use of resources in the development of reasonable, practical and balanced environmental controls. Devoting a large private and public sector paperwork effort on one percent of the waste, which is not a problem, seems neither prudent nor balanced.

The Chamber supports EPA's current policy that exempts businesses which generate small quantities (1000 kilograms or less per month) of hazardous waste from RCRA's massive regulatory program. This exemption enables EPA to apply its resources to managing the remaining 99 percent of the nation's hazardous waste.

A seemingly simple change, to lower the 1000 kg exemption to, say, 100 kg, would require an additional 150,000 small businesses to comply with RCRA's regulations. Gas stations, dry cleaners, printshops, hardware stores and the like, would have to obtain permits and bear a large additional cost for waste treatment, testing and liability insurance disproportionate to the size of the businesses or of the problem. None of these regulatory programs will result in any significant environment improvement, but the costs will be passed on to the consumer.

Your committee has already reported S. 2432 to reauthorize RCRA for two years. I understand the committee's intent is to allow the statute and its regulations this additional time to mature and develop. This approach is sound and warrants your continued support.

I hope you find these views useful, and I respectfully request that this letter be made a part of the hearings record.

Cordially,

Hilton Davis

Hilton Davis

cc - Committee members

CCA

Container Corporation of America

1100 Connecticut Avenue N.W.
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Phone 202 463-7470

April 26, 1982

Comments to the

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

on

Reauthorization of the Resource Conservation and Recovery Act

by

Container Corporation of America

COMMENTS TO THE ENVIRONMENTAL POLLUTION SUBCOMMITTEE SENATE ENVIRONMENT AND NATURAL RESOURCES COMMITTEE ON REAUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

Container Corporation of America is pleased to submit comments on the reauthorization of the Resource Conservation and Recovery Act. This statement is also presented on behalf of the American Paper Institute.

As the nation's largest consumer of recyclable paper, Container Corporation last year processed almost one million tons of recyclable paper at thirteen mill locations in the United States, eleven of which depend exclusively on recyclable paper as their raw material.

In the paper and paperboard industry as a whole there are about 350 mills which processed a total of 16 million tons of recycled paper last year, and 2 million tons were collected for export. This 18 million ton level, representing a 50 per cent increase in collections over the last decade, accounts for 26 per cent of all paper and paperboard used in this country.

The purpose of our statement is two-fold: 1) to alert the committee to solid waste management policies, promoted under Subtitle D of RCRA, which pose a threat to the existence of the paper recycling industry; and 2) to request the adoption of technical amendments to RCRA which clarify the original intent of Congress that materials recovery or recycling should be an integral part of state solid waste planning.

Solid waste management policies at the state and local level are being developed which may curtail or even deny paper recyclers access to their sources of supply. These policies, known as "flow control", may be adopted where energy recovery from waste is advanced as a solution to the solid waste management problem. "Flow control" gives the local government exclusive authority over the disposal of municipal solid waste, thereby permitting the diversion of all waste to the waste-to-energy facility. If these policies make no distinction between municipal solid waste and recyclables, paper recycling may be severely impacted. Recyclable paper, in our opinion, is an industrial raw material with established values and markets which has historically traveled in interstate commerce and should not be lumped together with waste that is discarded and not recycled.

We believe that Congress did not intend that private markets for recyclable materials or recoverable materials should be replaced by municipal control. Indeed, under the objectives (Section 1003) of Substitle D of RCRA, Congress called for "a cooperative effort among the Federal, State and Local governments and private enterprise in order to recover valuable materials and energy from solid waste." (Emphasis added).

Congress further recognized that the recovery and conservation of recovered materials can reduce the dependence of the U.S. on foreign resources and reduce the deficit in its balance of payments. (Section 1002(c)(3)). In fact, recyclable paper is a world commodity of which the U.S. is the major exporter.

Further evidence of the fact that Congress intended materials recovery as well as energy recovery to be an integral part of solid waste management appears in other Subtitle D sections of RCRA. For example, the Act directs that markets for recovered materials be studied and developed (Section 5003); and mandates that federal agencies, as well as states using federal funds, procure materials composed of the highest percentage of recovered material "practicable". (Section 6002).

Excerpts from the House Committee report also confirm congressional intent that materials recovery is a clear objective. It states:

> The Committee recognizes that the most effective approach for alleviating the problems created by discarded materials is a comprehensive discarded materials management approach. Such an approach includes the use of techniques to recover the greatest amount of energy and materials possible from discarded materials; reduce waste residuals to a minimum, and provide for an environmentally sound disposal of the remainder, principally through sanitary landfill. (Emphasis added).

It is clear from the objectives and legislative history of RCRA that Congress sought to establish a balance between materials and energy recovery in the management of solid waste.

As we noted earlier, however, in response to this RCRA mandate, some state and local solid waste planning efforts have promoted energy recovery to the exclusion of recycling. In part this problem has been caused by the fact that Subtitle D, which spells out the parameters of the state plans, does not refer to the terms "recovered materials" or "materials recovery." Consequently, the emphasis on state planning efforts has been on energy recovery from waste and not materials recovery. Such an emphasis could inadvertently cause a reduction in materials recovery with additional materials being burned for their energy value rather than recovered for their material value.

In order to clarify the intent of Congress under RCRA with respect to material recovery and to assure balance in solid waste management planning between recycling and burning, we request the following technical changes be made to RCRA.

1. Amend Section 4003(a,(2) of RCRA by inserting the following after the words "resource recovery" and before "or (B)":

", including private recycling of recovered and recoverable materials."

2. Amend RCRA Section 1004(27) the definition of solid waste by striking the period at the end thereof and inserting the following"

", or recovered materials."

3. Amend Section 4003(a)(5) of RCRA by striking out the period at the end thereof and inserting the following:

> "; provided however that the plan shall further provide that no state or local government shall interfere with, restrain, or prohibit any individual's access to recovered or recoverable materials."

These amendments would help to clarify the intent of Congress that a comprehensive solid waste management plan should include the use of techniques to recover the greatest amount of energy and materials possible from discarded materials. We believe energy recovery and materials recovery are compatible, but that neither should be advanced to the exclusion of the other.

The need to clarify congressional intent on the importance of materials recovery to comprehensive solid waste management planning is particularly urgent in light of a recent court decision addressing the legality of municipal control of solid waste including recyclables. In this case, Akron v. Hybud Equipment Company, the U.S. Court of Appeals (6th Circuit) addressed the policy question of whether "private markets should be replaced by municipal control of recyclable wastes." The court held that:

> "The policy question here, in our judgment, is debatable and should not be taken out of municipal hands by federal courts in the absence of congressional intent clearly expressed."

We believe that the reauthorization of RCRA presents the Congress with an opportunity to clearly articulate such a policy and reaffirm its intent that solid waste management planning strike a balance between energy and materials recovery.

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Leslie Cheek
Vice President
Federal Affairs

June 23, 1982

The Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
4204 Dirksen Senate Office Building
Washington, D. C. 20510

Dear Mr. Chairman:

Re: Hazardous Waste Facility Inspection Program

Among the issues on which your Subcommittee will hear testimony on June 24 is a proposal by the Hartford Steam Boiler Inspection and Insurance Company (HSB) to amend the Resource Conservation and Recovery Act (RCRA) to require periodic inspection of hazardous waste treatment, storage, and disposal facilities (TSDF's).

While we greatly appreciated your invitation to testify at the June 24 hearing, we will be represented by a spokesman for the American Insurance Association to which our companies belong, since there is substantial support within the insurance industry for a mandatory TSDF inspection program under RCRA.

My purpose in writing to you is to urge in the strongest possible terms that any TSDF inspection program crafted by the Subcommittee prohibit insurers from conducting governmental safety compliance inspections of facilities they are simultaneously insuring against environmental impairment liability (EIL).

Insurers providing EIL coverage to TSDF owners can serve as a useful supplement to government safety regulation through the performance of underwriting inspections and subsequent compliance audits. But they should never be deputized, in the case of facilities as to which they are at risk, as substitutes for government enforcement of public safety policy.

Liability insurers have fiduciary obligations to their insureds. Any inspection program that would permit insurers to assume competing obligations to governmental authorities would seriously compromise insurers' ability to supplement public safety regulation.

Permitting insurers to conduct, under government contract, safety inspections of facilities they insure would force them to choose between a contractual responsibility to defend and another contractual obligation to police their policyholders. TSDF owners' knowledge that sensitive information essential to insurers' ability to *protect* them from liability could be used by those insurers to help the government *prosecute* them would discourage the development of voluntary loss prevention programs based on mutual trust between insurers and insureds.

The Congress has before considered -- and rejected -- a proposal to exploit the private insurer-insured relationship in the pursuit of public objectives. In 1975, the Senate Commerce Subcommittee on the Consumer rejected a proposal advanced by the Consumer Product Safety Commission (section 5, S. 644, 94th Congress, first session) that would have required product liability insurers to give the Commission any "information which reasonably supports the conclusion" that their insureds' product "fails to comply with an applicable consumer product safety rule" or "contains a defect which would create a substantial product hazard."

The Subcommittee abandoned this proposal after the American Insurance Association pointed out that it would:

> ...(1) seriously compromise insurers' voluntary efforts to prevent product injury; (2) subvert the ability of insurers to fulfill their obligation to defend their insureds against product liability claims; (3) make underwriting and claims handling so difficult that many insurers would abandon the product liability field; and (4) drive many manufacturers to insurers whose loss prevention services are minimal or nonexistent, thereby weakening the influence of the remainder of the insurance industry over product safety.*

Similarly, when Occupational Safety and Health Administration (OSHA) inspectors began demanding copies of insurance company recommendations for safety improvements during their workplace inspections and used these reports as the basis for citations for violations of OSHA standards, even when the employer had already initiated hazard abatement programs, employers reacted by discouraging safety surveys by their insurers, out of apprehension that the survey results would be used against them in OSHA proceedings.

When it learned of this situation, OSHA immediately issued a policy statement restricting the inspection of records by compliance officers "to those required by the Act and the implementing regulations and those directly related to the purposes of the inspections....(O)ther records, such as records of company self-inspections (joint or otherwise) and insurance company recommendations, will not be requested by the compliance officer during an inspection...."* The basis for this policy, the statement said, is that:

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* Statement of American Insurance Association concerning Section 5 of S. 644, the Consumer Product Safety Commission Improvement Act of 1975, February 28, 1975, at 2-3.

> ...(i)n carrying out compliance responsibilities, OSHA under no circumstances will establish policy or take other action which would discourage employers and employees in any way from taking all possible voluntary steps to eliminate hazards in the workplace.**

While the HSB proposal would not require insurers to conduct government-mandated safety inspections of TSDF's they insure, it would permit them to qualify for the opportunity to do so under contract with a governmental authority. We think it would be poor public policy to allow the conflict of interest inherent in such a situation to exist, hence our recommendation that no insurer (or insurer-affiliated entity) otherwise eligible to conduct safety inspections be permitted to inspect, on behalf of the government, a facility it also insures.

Our recommendation would permit HSB and other insurers who wish to profit from the enhancement of public safety to compete for the opportunity to inspect TSDF's other than those to whose owners they have already sold their private loyalty.

Sincerely yours,

Les Cheek

Leslie Cheek, III
Vice President-Federal Affairs

LC/kor

cc: Josephine S. Cooper ✓
William M. Corcoran
Philip T. Cummings
Charlene A. Sturbitts

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* Position Statement re. Use of Records as a Basis for Compliance Actions Under the Williams-Steiger Occupational Safety and Health Act of 1970, Occupational Safety and Health Administration, U.S. Department of Labor, July 23, 1971.

** Ibid.

JOHN J. KEARNEY, Senior Vice President

EDISON ELECTRIC INSTITUTE The association of electric companies

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July 15, 1982

Honorable John Chafee
Chairman, Subcommittee on Environmental
Pollution
Senate Committee on Environment and
Public Works
4204 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman,

The Edison Electric Institute (EEI) is pleased to offer its comments on substantive amendments to the "Resource Conservation and Recovery Act Reauthorization Act of 1982."

EEI is the association of investor-owned electric utility companies in the United States. Our members provide approximately 77 percent of the total electric generating capacity of the United States. In cooperation with our affiliate, the Utility Solid Waste Activities Group, EEI has been committed to assisting EPA in developing rational RCRA regulations. We have filed substantive comments on most RCRA proposals and have offered testimony at public hearings conducted by EPA.

EEI favors reauthorization of RCRA, but opposes extensive substantive amendments to the statute. The House, for example, has proposed in H.R. 6307 significant changes to RCRA, but these amendments have not been the subject of the comprehensive congressional hearings that they merit. Because many of these proposed changes to RCRA would severely disrupt a regulatory program that is only now getting underway, we believe they would be premature and unsound public policy.

To assist the Subcommittee in its consideration of some of these proposals, we offer specific comments on those amendments of greatest concern to EEI. If the Subcommittee decides to recommend substantive amendments to RCRA, we encourage you to take into account our position and suggested changes to the House bill (H.R. 6307) as a basis for your amendments.

Burning of Hazardous Substances for Energy Recovery

Electric utilities are particularly concerned about Section 6 of the House bill, which could add a disruptive and unnecessary layer of regulation to utility operations. This section would mandate reporting by, and regulation of, facilities which burn "hazardous substances" for purposes of heat recovery. We oppose its inclusion in any final legislation.

The vast majority of electric utility boilers could be encompassed within the reporting and regulatory requirements such as those set forth in this section, since many typically burn supplemental fuels and materials other than their principal fossil fuels. These include materials produced in conjunction with the combustion of fossil fuels, such as boiler cleaning solution and demineralizer regenerant, as well as used rags, general clean-up solvents, and similar materials. However, there is no basis to regulate these combustion units, since the high heat levels, efficiency of the boilers, and the relatively small proportion of "waste" materials minimizes any potential environmental or health impacts.

In the 1980 RCRA amendments, Congress wisely suspended RCRA regulation of waste materials produced in conjunction with fossil fuel combustion until after completion of a study of their actual environmental effects and related matters. See RCRA § 3001(b)(3); § 8002(n). This study is actively underway and, in our view, is the proper forum for reviewing any questions which may exist as to utility "waste" management practices. Thus, we strongly support continued inclusion in both subsections of Section 6 of the directive that "nothing in this subsection shall be construed to affect or impair the provisions of Section 3001(b)(3)." This will avoid duplication of regulatory effort and maintain the goals of the 1980 amendments.

However, we believe clarification is necessary to assure that the occasional incidental burning of rags, solvents, and similar material does not subject utility boilers to additional RCRA regulation. We thus propose the following two amendments to Section 6 of H.R. 6307 (as reported, May 21):

(1) at page 10, line 1, delete the period after the word "recovery" and insert the following:

> ", or in the case of facilities the average monthly fuel feed of which constitutes no less than 95% fossil fuels and in which combustion temperatures exceed 2000° Fahrenheit."

(2) at page 10, line 20, insert after the number "3001" the following:

> "provided, that no such regulation shall apply to facilities the average monthly fuel feed of which constitutes no less than 95% fossil fuels and in which combustion temperatures exceed 2000° Fahrenheit."

Use of the term "substances identified or listed under Section 3001" in place of the term "hazardous wastes" in both Sections 6 and 11 is needlessly confusing and should be deleted. No hearing record exists to elaborate the concerns motivating the substitution of the phrase. As a result, this section could be interpreted to expand greatly EPA's RCRA jurisdiction by implying that the Agency is required to regulate the management of hundreds of commercial products before they become wastes. EEI believes that this result can be avoided by relying on the language of Section 3001 which refers exclusively to hazardous wastes.

Related to the issue of regulating the burning of hazardous substances for the purpose of heat recovery is the proposal in Section 11 which would require EPA to promulgate regulations governing all "beneficial reuse of hazardous materials." Our discussion of that provision is set forth at pp. 10-12 below.

Section 3

Section 3 of H.R. 6307 would restrict the regulatory exemption from Subtitle C for small-quantity generators to those producing 100 kilograms of waste material per month, rather than the current 1000 kilogram threshold. EEI objects to this provision and urges its deletion. The question of the proper regulation of small generators is best left to the Agency's discretion. By severely curtailing EPA's flexibility to tailor regulations in this area, this amendment will impose an enormous administrative burden on EPA by extending the Subtitle C program to reach hundreds of thousands of small businesses without appreciably increasing environmental protection. In the utility industry, narrowing this exemption might result in the regulation of facilities posing no environmental hazards, such as utility boilers that occasionally burn rags, solvents and similar materials.

Furthermore, EPA is currently studying the merits of the small generator exemption in the context of a rulemaking proceeding. Any revision of this exemption is therefore premature and should await the results of that study.

Section 7(a)

This amendment adds a subsection (g) to Section 3005 of RCRA to require EPA (or a state under an authorized State hazardous waste program), as part of the permit drafting process, to "address any release of hazardous waste from such facility which occurs prior to the date of issuance of such permit." Despite the seeming simplicity of the language and the surface appeal of the proposal, more careful consideration reveals that it will prove costly to the regulated community and the Agency and will jeopardize the goal of streamlining the permitting process. EEI therefore opposes its enactment.

This amendment could add a second function to the permit process. Currently, RCRA requires EPA to review and issue permits for treatment, storage and disposal facilities in accordance with standards promulgated under Section 3004. If this amendment is enacted, however, EPA could be required to formulate remedial measures for past releases at the same or at nearby sites and condition issuance of the permit on compliance with those remedial measures, even though in all respects the facility met the applicable permit standards.

While EEI appreciates the concern about past releases, a remedial mechanism tied to the process for issuing a new permit is not necessary to address this problem. Ample authority already exists under the Comprehensive Environmental Response, Compensation and Liability Act ("Superfund") and under Section 3013 of RCRA to regulate the consequences of past management practices. By adding yet another area of concern to an already complicated permit writing process, this provision is certain to prolong the issuance of permits rather than to streamline it. Thus, at a minimum, this amendment contradicts the goal of Section 8 of H.R. 6307 which is aimed at speeding up the permit issuance process.

Section 7(a) could also result in holding the issuance of a permit hostage to completion of remedial steps at an adjacent or nearby location having nothing to do with the site subject to the proposed permit. The language of Section 7(a) is concerned with prior releases at a "facility" and the term "facility," though not defined in the statute, is defined broadly by EPA in its regulations as "all contiguous land, and structures, other appurtenances, and improvements on the land used for treating, storing or disposing of hazardous waste." However, that same definition also provides that a permit may be sought for a single treatment, storage, or disposal unit even though the unit may only be a small part of a larger facility. 40 C.F.R. § 260.10. The language of Section 7(a), when juxtaposed with EPA's regulations, therefore could require an expanded permit review of an entire facility and not merely the site for which a permit is sought. Moreover, where inactive land disposal units are contiguous to active ones, as is not infrequently the case, Section 7(a) could have the undesirable effect of delaying RCRA permitting of new disposal units until cleanup of inactive sites. Since Superfund already requires the cleanup of inactive sites with industry and government cooperation, this provision adds no new protection for the environment. Instead, it simply establishes an alternative mechanism for accomplishing what existing law already provides but does so at the cost of protracting an already lengthy permitting process.

Section 7(b)

Section 7(b) requires the Administrator to issue regulations limiting to 10 percent any expansion of the design capacity of hazardous waste management facilities qualifying for "interim status." EEI believes it is unnecessary to incorporate this limitation into the statute. The Agency's delay in issuing final land disposal regulations may preclude existing "interim status" disposal facilities wishing to expand in excess of 10 percent of the design capacity originally identified in its permit application from obtaining timely permitting. If any provision addressing this matter is to be included in these amendments, it should direct EPA to adopt regulations that allow the Agency's permit writers to approve increases in design capacity of interim status facilities upon a reasonable showing.

Section 8

Section 8 establishes a four-year deadline for EPA to issue permits for existing land disposal facilities and a six-year deadline for the Agency to issue permits for all other hazardous waste management facilities. This provision should be deleted. Issuance of permits is a time-consuming administrative task, requiring the Agency to evaluate elaborate data submitted by each permit applicant. We anticipate that the pace of processing permits will increase appreciably once the Agency completes the promulgation of land disposal regulations and then concentrates its resources on processing permits. Artificial statutory deadlines may result in a less than thorough administrative review of each permit application. An alternative danger might be that facilities capable of upgrading to meet permit standards if additional time were available instead might have their applications denied because of such statutory deadlines, unwisely forcing them to close down.

In short, rigid statutory deadlines may actually undermine the goals of the RCRA program by compelling EPA to emphasize speed rather than thoroughness in processing permits, and by impairing EPA's ability to afford reasonable time to a facility that is capable of upgrading to meet permit standards. A preferable approach for expediting the issuance of permits is EPA's proposal for class permits, discussed at pp. 12-13.

Section 9

Section 9 establishes a "National Groundwater Commission" to conduct a three-year study of groundwater issues and to report to Congress with "its recommendations for such legislative, and administrative actions, as it considers appropriate." While EEI concurs in the benefit of examining the nature and scope of contamination of the nation's groundwater, this study would duplicate ongoing EPA efforts to develop a national groundwater policy. The examination of groundwater issues contemplated in this provision therefore would be more efficiently conducted in the context of the Agency's current activity in this area.

Section 10

Section 10 seeks to overrule the effect of a recent Supreme Court decision, City of Milwaukee v. Illinois, 451 U.S. 304 (1981). In that case, the Court held that any federal common-law nuisance remedy previously available to the State of Illinois in a suit against the City of Milwaukee regarding discharge of sewage into Lake Michigan had been preempted by the Clean Water Act. The Court rejected the argument that Section 505(e) of the Clean Water Act, 33 U.S.C. § 1365(e), preserved common-law remedies after enactment of comprehensive, federal clean water legislation.

By this amendment, the House Committee endeavors to overrule the precedent established in the Milwaukee case as it applies to RCRA. The effect of this Amendment could be to permit, and, indeed, encourage federal court suits against owners or operators of hazardous waste management facilities that are fully in compliance with all applicable RCRA standards. As a result, federal courts could be required to enforce two sets of hazardous waste standards for each facility -- the standards promulgated by EPA in the form of RCRA permit regulations, and uncodified and inevitably ambiguous common-law standards formulated by federal judges on a case-by-case basis. This dual approach to hazardous waste regulation could increase uncertainty and confusion in the regulated community because compliance with formal EPA and state permit regulations may not limit a hazardous waste management facility's exposure to litigation based on unpublished standards of common-law liability. Such uncertainty is bound to deter construction of new hazardous waste facilities.

The statute, in its present form, establishes a comprehensive scheme requiring owners and operators of hazardous waste management facilities to meet detailed requirements as necessary to protect human health and the environment. The principle of City of Milwaukee v. Illinois, as applied to RCRA, preserves the integrity of that system. Absent any determination by the Congress that RCRA is inadequate to do the job envisioned by its drafters, Congress should reject the House Committee's proposal to allow federal judges to impose a second federal scheme of hazardous waste regulation.

Section 11

The electric utility industry has actively and successfully developed reuses for its high-volume by-products -- fly ash, bottom ash and slag and scrubber sludge[*/] -- significantly reducing the volume of material that must be disposed. As noted above, Congress amended RCRA in 1980 to defer regulation of these materials and other by-products generated from the combustion of coal and other fossil fuels, pending a study of the environmental effects of such by-products. See RCRA § 3001(b)(3); § 8002(n). EEI opposes Section 11 because it may undermine the purposes of that study and the resource recovery goals of the statute by requiring the Agency to regulate materials that may be confirmed to be environmentally harmless when the study is completed.

EEI believes that the regulation of any resource conservation activities requires considerable Agency flexibility to balance RCRA's twin statutory goals of effective hazardous waste management and resource conservation through beneficial use and reuse. If indeed Section 11 is interpreted broadly to require the regulation of all recycled materials, the resource conservation goals of the statute would be significantly deterred, thereby increasing the nation's waste-disposal problems and exacerbating material and resource scarcity. Further, such comprehensive regulation would discourage innovation with respect to recycle and reuse practices. For these reasons,

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[*/] Ash and slag are extensively utilized as raw materials in cement, as highway construction materials and in other applications. Scrubber sludge has a wide variety of potential uses, including use as a material in gypsum wallboard, in cement, as a road base fill material, and for land recovery.

we strongly urge that Section 11 be rejected. If, however, the Subcommittee believes the section should be retained, we urge clarification that EPA need only direct its efforts to those recycling activities that have been demonstrated to threaten human health and the environment. Alternatively, the statute should direct EPA to tailor its regulations so that they minimize any adverse effect on resource conservation and recovery.

The difficulty of regulating recycling activities should not be minimized. This effort involves complex technical judgments about industrial processes and reuse technologies with which the Congress may not be familiar. The Subcommittee should be aware that EPA has undertaken a rulemaking proceeding to address this task. With the detailed knowledge of this subject EPA has acquired, further Congressional action should await assessment of the fruits of EPA's efforts.

Class Permits

In its testimony before the Subcommittee on June 24, 1982, EPA proposed amending H.R. 6307 to provide the Agency with authority to establish performance standards and permit conditions for particular classes of hazardous waste management facilities. Under this class permit concept, the Agency would issue essentially identical permits to facilities which share common features and waste management practices and are not affected by site-specific features. The owners and operators of facilities within the class would submit a simplified permit application and certify that they will comply with the class permit conditions.

EEI endorses this concept in principle as a means of streamlining the permitting process and reducing the regulatory burden for many types of hazardous waste management facilities. By granting EPA authority to issue class permits, the Agency will have obtained a valuable tool to meet its responsibility to issue permits expeditiously, without the need for Congress to establish rigid deadlines. Moreover, Congress has already authorized a similar approach under the Clean Water Act. See § 404(e), 33 U.S.C. § 1244(e). Although we have not seen the specific language of the amendment proposed by EPA and may wish to comment on that language when it becomes available, we urge the Subcommittee to give serious and favorable consideration to this proposal.

EEI hopes that these comments will be of value to the Subcommittee in its deliberations.

Sincerely yours,

John J. Kearney

John J. Kearney
Senior Vice President

tfi
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June 28, 1982

The Honorable John H. Chafee
Chairman, Senate Subcommittee on
Environmental Pollution
4204 Dirksen Senate Office Building
Washington, D.C. 20510

RE: Reauthorization of the Solid Waste Disposal Act

Dear Chairman Chafee:

Enclosed for inclusion in the record of the Environmental Pollution Subcommittee's June 24, 1982 hearing on the Reauthorization of the Solid Waste Disposal Act (S. 2432), is the statement of The Fertilizer Institute (TFI).

TFI appreciates the opportunity to submit this statement which details the position of TFI on this most important measure. If you have any questions concerning the enclosed statement or any other aspect of TFI's position on the Reauthorization of the Solid Waste Disposal Act, please feel free to contact TFI.

Sincerely,

Edwin M. Wheeler

EMW:pab
Enclosure

STATEMENT OF THE FERTILIZER INSTITUTE ON S. 2432, A BILL TO AMEND AND EXTEND THE SOLID WASTE DISPOSAL ACT

Perhaps the most important issue which has been injected into the Congressional debate on the reauthorization of the Solid Waste Disposal Act (SWDA) is the extent to which Congress wishes to authorize the Environmental Protection Agency (EPA) to regulate not the disposal of solid waste, but its beneficial use, reuse, recycling and reclamation.

The Fertilizer Institute (TFI) does not believe that it is either appropriate or in the best interests of environmentally sound waste handling to address recycling in a statute which is designed to regulate disposal rather than beneficial use of wastes.

The current Senate version of the SWDA Reauthorization Bill (S. 2432) does not address the recycling issue. However, the Reauthorization Bill reported by the House Energy and Commerce Committee (H.R. 6307) does address this important question. Section 11 of H.R. 6307 would amend §1004(27) of SWDA to require EPA to regulate all beneficial use and recycling of materials which have been identified as "hazardous wastes." Pursuant to §11 EPA would be free to regulate hazardous waste recycling to the same degree and extent it regulates hazardous waste disposal.

The report accompanying H.R. 6307 claims that this provision merely recognizes authority which EPA has possessed since the amendment of SWDA by the enactment of the Resource Conservation and Recovery Act of 1976 (RCRA).

This claim is open to serious doubt and is belied by the very structure of the amendment proposed by §11. The statutory section which §11 seeks to amend defines the term "solid waste." Yet, the language which would be added by §11 is regulatory and does not define anything.

The claim that RCRA originally authorized EPA to regulate all recycling of hazardous waste, without limitation, is also belied by the legislative history of the 1976 Act. In its report to accompany the Bill which eventually became RCRA, the House Committee on Interstate and Foreign Commerce stated:

> Much industrial and agricultural waste is reclaimed or put to new use and is therefore not a part of the discarded materials disposal problem the Committee addresses. An increase in reclamation and reuse practices is a major objective of the Resource Conservation and Recovery Act.
>
> [H. Rep. 94-1491-Part I, 94th Cong.
> 2nd Sess., Sept. 9, 1976, at 6240]

In the face of this clear legislative history it is difficult to accept §11 of H.R. 6307 as a simple restatement of EPA's current authority. In fact, EPA's authority to regulate reuse and recycling under RCRA has been the subject of a long series of discussions involving EPA, the regulated community and environmental groups. These discussions appear near culmination in a major EPA rulemaking on recycling under RCRA.

TFI submits that Congress should leave this most important question to this long-standing rulemaking and not act hastily on the recycling issue on the basis of a representation of intent which may not be entirely accurate.

A requirement that EPA regulate waste recycling in all cases could have enormous practical consequences. To cite just one example in the fertilizer industry, take the case of hydrofluorosicilic acid (HFSA).

HFSA is a co-product of air pollution control employed in the manufacture of phosphoric acid - a basic fertilizer chemical. Co-product HFSA is used by over 7,000 communities nationwide, including New York and Chicago, to provide fluoridation of drinking water serving over 100 million Americans. Fluoridation is a process which has been repeatedly and unquestionably demonstrated to be of enormous significance in the battle against tooth decay in both children and adults.

Yet, because it is an acid and because it is produced as a co-product of air pollution control, HFSA could technically be classed as a "hazardous waste" under EPA's current regulations. Should §11 of H.R. 6307 become law, EPA would be required to regulate the production, distribution and use of HFSA for fluoridation. Under current EPA regulations manufacturers, distributors and users would be required to carry enormous paperwork burdens. In addition, equipment used in the production, distribution and storage of HFSA could be required to meet the same design and operational criteria currently required of facilities engaged in the actual treatment and disposal of hazardous waste. Furthermore, each of the over 7,000 communities using HFSA would be required to obtain a RCRA permit for the tanks used to store HFSA prior to its use in fluoridation. What benefit would this accomplish? And at what cost? Compliance with design and operating standards, paperwork, and permit requirements currently applicable to hazardous waste treatment and disposal could make the re-use of HFSA economically infeasible. This would be a calamity for our country. Today, as a result of the decline in phosphoric acid production occasioned by the general economic down-turn, some of our member companies have been contacted by HFSA users concerned that the down-turn in HFSA production could impair their fluoridation programs. What reaction could we expect should excessive, unnecessary regulation make HFSA totally unavailable?

Because, as the case of HFSA demonstrates, the reuse and recycling of wastes is something to be encouraged, and because recycling and waste disposal are inherently different processes with different purposes and different human health and environmental effects, TFI believes that it would be inappropriate for Congress to authorize EPA to regulate recycling in the same manner as waste disposal and under the same statute which authorizes regulation of such disposal. Certainly such a step would be inappropriate without detailed Congressional study of the risks and benefits associated with hazardous waste recycling. Consequently, should the regulation of recycling be determined to be necessary, it should be provided for in separate legislation after full Congressional consideration of the recycling issue.

Furthermore, should Congress determine to authorize EPA regulation of waste recycling either under SWDA or in separate legislation, it is essential that the legislation recognize the inherent differences between recycling and waste disposal, as well as the need to encourage recycling as an alternative to disposal.

To ensure that this important goal is met TFI suggests that any bill authorizing EPA regulation of recycling require that EPA consider the many factors distinguishing recycling from waste disposal in promulgating any recycling regulations. Four of the more important distinguishing factors which any bill should require EPA to consider in regulating recycling include:

1. The degree of environmental or health hazard posed by the waste and the use, reuse, recycling or reclamation practice to be regulated;
2. The cost of the regulation in relation to the environmental or health benefits it will achieve;
3. The effect of the regulation on the continued use, reuse, recycling or reclamation of the hazardous waste; and
4. The inherent difference between the recycling and disposal of wastes.

TFI appreciates the opportunity to submit this statement and to make the Congress aware of its position on this most important legislative issue.

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June 23, 1982

The Honorable Senator John H. Chafee
Chairman, Subcommittee on
Environmental Pollution
Dirkson Office Building, Room 5229
Washington, D.C. 20410

Re: RCRA Reauthorization Bill

Dear Senator Chafee:

On behalf of the Hazardous Waste Treatment Council, we would like to submit these written comments on the pending Resource Conservation and Recovery Act Reauthorization of 1982. The Hazardous Waste Treatment Council ("the Council") is a trade association of companies engaged in the destruction, detoxification, stabilization and recycling of hazardous waste. The Council endorses the House Committee on Energy and Commerce RCRA Reauthorization bill, H.R. 6307, and urges the Committee to adopt the House provisions, particularly Section 6.

The problem of the uncontrolled burning of hazardous wastes was described in the Council's citizen suit notice letter of April 20, 1982 (copy attached). We will not repeat here our analysis of the problem set out in this letter, but would like to add abstracts on specific examples of problems stemming from uncontrolled burning of hazardous waste. In addition to the attached abstracts, we are submitting documents which describe the reported problems in more detail.

It is urgent that the Committee act to close this loophole by requiring EPA to promulgate certain minimal tracking and recordkeeping requirements while the Agency works on the more complex problem of how to write substantive rules on burning -- rules required by Section 6 within two years. In the interim, consumers have a right to know when hazardous waste is in their fuel oil and government compliance officials would have an opportunity to scrutinize potentially unsafe practices.

Finally, the Council is happy to support a measure now sponsored by Senator Hart and Senator Moynihan to require treatment of certain highly hazardous wastes before disposal (copy attached). We understand that this bill will be offered as an amendment to the Senate RCRA reauthorization bill and support prompt action on the measure. We are carefully examining the precise language of the bill, but feel that the concept is sound and the logic quite convincing.

A position paper outlining the technical problems of unrestricted landfilling, an abstract of studies on the problems of containing certain wastes without treatment, and copies of the studies are also provided as attachments. Detailed hearings in the House focused on these problems in connection with the RCRA reauthorization and your Committee has previously received detailed information on landfill problems.

The Council hopes that the amendment will be promptly considered and that a first step toward an orderly transition away from undue reliance on landfilling will be taken by Congress this year. The Comptroller General concluded in 1980 that "on-land disposal needs to be drastically reduced."

We would be happy to work further with Senators and the Committee staff to make the record on this important legislation a full and complete one.

Sincerely,

Randy M. Mott

Marvin B. Durning
Randy M. Mott
Richard H. Hall
Scott Schwarz

Zuckert, Scoutt & Rasenberger
888 Seventeenth Street, N.W.
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cc: Members of the Committee

Hazardous Waste Treatment Council
P.O. Box 57212-0202 • Washington, D.C. 20037

COMMENTS ON FEDERAL LEGISLATION TO REQUIRE TREATMENT OF CERTAIN HAZARDOUS WASTES PRIOR TO DISPOSAL

A basic objective of the Hazardous Waste Treatment Council is to promote the destruction, detoxification, stabilization, recycling and other treatment of hazardous waste. The Council opposes the unrestricted landfilling of all types of hazardous waste regardless of their toxicity, persistance or ability to mitigate through landfill liners and through groundwater.

S.2466 would require the Environmental Protection to list hazardous wastes which require specified treatment prior to disposal. This simple mandate would begin the phase-down of uncontrolled landfilling by requiring treatment of wastes which cannot be safely contained in landfills. The technical data contained in the accompanying notebook fully support the conclusion that some types of wastes, which are toxic and relatively persistent in groundwater, cannot be contained, *even in the relatively near term*.

The need to shift away from the practice of disposal of hazardous wastes without prior treatment is one that virtually everyone recognizes. The United States Comptroller General concluded in 1980:

> Disposal on the land is the predominant hazardous waste disposal method used. Yet it presents the greatest potential risk for surface and groundwater contamination and liability for damages. For the longterm interest of the country, on-the-land disposal needs to be drastically reduced. 1/

In this same vein, Science magazine noted in 1979:

> The disposal option of last resort is burial in the ground. It's not the ideal situation, it's not necessarily even a good solution. The problem then is to regulate landfills in such a manner that potential problems created by escape of toxic materials are minimized. 2/

One of the authors of much of the research into the effects of toxic organic wastes on landfill liners concluded:

> Landfills are an extremely tenuous method of temporary storage of our hazardous wastes . . . the end products [of degradation] are often harmful, if not more so, than the wastes put into the landfill. 3/

The Environmental Protection Agency has also recognized the dangers posed by the landfilling of untreated hazardous waste:

> There is good theoretical and empirical evidence that the hazardous constituents which are placed in land disposal facilities very likely will migrate from the facility into the broader environment. This may occur several years, even many decades, after placement of the waste in the facility, but data and scientific prediction indicate that, in most cases, even with the application of best available land disposal technology, it will occur eventually. 46 Fed. Reg. 11126, 11128 (Feb. 5, 1981).

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[1] Comptroller General of the United States, Hazardous Waste Disposal Methods: Major Problems With Their Use November 19, 1980.

[2] Science Magazine, Volume 204, June 1979, p. 1295.

[3] K. W. Brown, Soil & Crop Science - Texas A. M. University Letter of Comment to EPA, RCRA Docket.

S.2466 addresses the hard lessons learned from our nation's experience with landfilling. We know that some materials present more extreme risks in landfills and that treatment technology is available for these same wastes. Restrictions on the landfilling without treatment of many types of hazardous wastes have been successfully implemented in many states by rule or permit restriction. The State of California has proposed a phase-down of landfilling of many types of wastes, including halogenated organics which include compounds that have routinely penetrated landfill liners. Once enacted, the Council urges that the lists of substances successfully restricted by states should be proposed as a list for comment by EPA under this legislation.

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April 20, 1982

Ms. Anne M. Gorsuch
Administrator
U. S. Environmental Protection Agency
401 M St. S.W.
Washington, D. C.

Re: Citizen Suit Notification on
RCRA Exemption of Boilers

Dear Ms. Gorsuch:

We represent the Hazardous Waste Treatment Council ("the Council"), a trade association of companies engaged in the treatment, destruction and detoxification of hazardous wastes. The Council was organized in February 1982 to promote regulatory incentives for the safe and environmentally sound treatment of hazardous wastes.

This letter fulfills the requirements of Section 7002(b) of the Resource Conservation and Recovery Act ("RCRA") by notifying the agency that the Council intends to initiate an action in United States District Court to challenge EPA's failure to promulgate notification and interim status regulations for facilities burning hazardous wastes as fuel. While the Agency has consistently recognized that "improper incineration of hazardous waste can be a serious health problem," 1/ EPA continues to exempt the uncontrolled burning of 20 million metric tons of hazardous waste 2/ because it is "being burned as a fuel for the purpose of recovering usable energy." 40 C.F.R. §261.2(c)(2).

1/ 45 Fed. Reg. 33161 (1980).

2/ Acurex Corp., "A Technical Overview of the Concept of Disposal of Hazardous Waste in Industrial Boilers," EPA contract 68-03-2567, Task 4034, October 1981, p. 1.

Overview

The unregulated burning of ten times the volume of wastes covered by Subpart O standards for incineration presents an imminent threat of potential harm to public health and the environment. EPA has made factual findings that incineration of wastes must achieve 99.99% destruction and removal efficiency if it is to be safe. This indicates that the far less efficient combustion of these same wastes in industrial boilers and process units presents a threat to public health and the environment.

EPA concedes that these facilities burning hazardous wastes are within the scope of Resource Conservation and Recovery Act ("RCRA") and will in the future regulate them. In the meantime, however, the Agency exempts the facilities from its interim status regulations for treatment, storage, and disposal facilities, leaving them unregulated. EPA lacks discretion to continue this exemption. EPA has announced a proposed settlement of the Court of Appeals litigation in *AMSA* v. *EPA*, No. 81-1440, which will eventually lead to permitting standards or permits-by-rule for facilities burning wastes as fuel. However, the Agency has failed to require that all such facilities comply with the notification requirements for treatment storage and disposal facilities ("TSDFs") under Section 3010 of RCRA and has failed to provide any interim status treatment or disposal requirements for these facilities under Section 3004 or Section 3005. EPA cannot legally continue the exemption of facilities covered by Section 3004, while agreeing in principle to regulate them at some undetermined future date.

To aid the Agency's prompt closing of this loophole in the rules, the Council has included as Appendix 1 hereto, a detailed draft rule to cover the use of wastes as fuel during interim status.

The Threat to Public Health

In developing its rules for stringent controls over the incineration of hazardous waste, EPA found that:

> "When known carcinogens are incinerated and if combustion conditions are not properly maintained . . . quantities of these compounds will be emitted from the stack and may affect the health

of those humans exposed to them." 3/

This concern was echoed by EPA in its January 1981 report to Congress under the Used Oil Recycling Act of 1980: "uncontrolled burning of certain used oils . . . may result in significant levels of hazardous emissions to the environment . . . ."4/ EPA's technical contractor studying this subject also found that "[b]urning wastes in boilers will impact stack emissions." 5/ An attorney from the EPA's Office of General Counsel has acknowledged that "[t]here can be serious public health hazards from [burning hazardous wastes in boilers] . . . if the emissions come out in an uncontrolled manner." 6/ Another EPA official warned that:

> "If you are going to burn hazardous waste in all boilers, you may be getting unacceptable levels of risk." 7/

Yet EPA officials concede that the "use of hazardous waste as fuel is not currently regulated." 8/

Since EPA has already defined the acceptable level of risk as 99.99% destruction and removal efficiency for burning in incinerators, 9/ the Agency is legally and logically compelled

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3/ EPA, Background Document "Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities under RCRA, Subtitle C, Section 3004, Incineration Standards, 40 CFR §264 and §265, Subpart O," Revised edition, January 1981, p. 13. (hereinafter cited as Background Document).

4/ United States Environmental Protection Agency, Report to Congress, "Listing Waste Oil as a Hazardous Waste," January 1981, p. 77.

5/ Acurex Corp. "Engineering Analysis of the Practice of Disposing of Hazardous Waste in Industrial Boilers," EPA Contract No. 68-03-3043, Task SCA 04, January 1982, p. 2-2.

6/ United States Environmental Protection Agency, Proceedings of the Hazardous Waste Combustion Workshop, Cincinnati, Ohio, April 21-22, 1981, p. 7. (hereinafter cited as Boiler Workshop).

7/ Id. at p. 96.

8/ Id. at p. 2.

9/ Background Document, supra at p. 93.

to the same finding for boilers. 10/ Recovery of heat from the combustion process obviously does not change the risks presented by the uncombusted, uncaptured hazardous constituents emitted from the stack. 11/

Using EPA's own yardstick, the "common practice" 12/ of burning hazardous wastes in boilers is presenting unacceptable levels of risk. Even in the major chemical companies engaged in burning toxic waste as fuel, 43% of the facilities burning toxic wastes are below EPA incinerator standards for destruction and removal efficiency designed to protect public health and the environment. 13/ A representative from a major chemical company publicly indicated that "many of our boilers could be shut down because very few of them are making four 9's destruction efficiency." 14/ This

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10/ The EPA does not have discretion under RCRA selectively to regulate one type of facility covered by the Act while electing not to regulate another type of facility which is also covered, especially where those facilities present almost identical regulatory concerns. See Association of America Railroads v. Costle, 562 F.2d 1310, 1316-21 (D.C. Cir. 1977) See also ASARCO, INC. v. EPA, 578 F.2d 319, 326 (D.C. Cir. 1978). In addition, an agency cannot take clearly inconsistent actions -- such as the EPA's arbitrary regulation under RCRA -- without providing a reasoned analysis of the reasons behind and factual differences supporting those inconsistent actions. This the EPA has failed to do. See Atchison, Topeka & Santa Fe Ry Co. v. Wichita Bd. of Trade, 412 U.S. 800, 808 (1973); Local 77, Democratic Union Organizing Comm. v. N.C.R.B., 603 F.2d 862, 872 (D.C. Cir. 1978); Public Serv. Co. of Indiana v. F.E.R.C., 584 F.2d 1084, 1086 (D.C. Cir. 1978); Delta Airlines v. C.A.B., 561 F.2d 293, 311 (D.C. Cir. 1977), cert. denied, 434 U.S. 1045 (1978).

11/ Moreover, the alleged savings in fossil fuel costs need to be balanced against increased maintenance costs, etc., if the true economic impact is to be measured. See Acurex, supra, January 1982, p. 10-7.

12/ Acurex, supra, January 1982, p. 2-1.

13/ Chemical Manufacturers Assn., "Industry Survey: Burning Spent Materials and By-Products in Energy Recovery Equipment," September 21, 1981, pp. 10 and 24.

14/ Boiler Workshop, supra at p. 49. See also Boiler Workshop, comment by Moore, supra at p. 94.

concession is all the more troubling, since it is generally felt that "[r]eputable companies would do a good job of destroying wastes in a boiler, but some less scrupulous companies would not." 15/

An EPA official conceded this point as well:

> "The biggest problem with not regulating boilers is that it leaves a big hole in the regulatory approach to waste disposal. In other words, if regulations exist for incinerators and we plan to implement these, what's the point if everybody could burn freely in boilers." 16/

The uncontrolled burning of toxic wastes has, in fact, led to "imminent and substantial endangerment" cases and other serious incidents threatening public health. See United States v. Laskin, Civil Action No. 79-759Y (N.D. Ohio, filed April 24, 1979) (alleging improper disposal of PCBs by burning in a boiler).

Legal Mandate to Regulate

The Administrator is legally compelled to take certain actions to regulate burning of waste: (1) promulgate, pursuant to Section 3002, regulations which require generators to record the final disposition of their hazardous waste; (2) regulate boilers and kilns in the same fashion as incinerators as treatment, storage and disposal facilities under Section 3004; (3) require boilers and kilns to notify as treatment, storage, and disposal facilities under Section 3010; (4) require boilers and kilns to obtain interim status or permits to continue burning hazardous waste; and (5) require that hazardous waste still meeting Subpart C characteristics after blending, as well as Subpart D listed wastes, be manifested to final treatment, disposal, or other disposition.

Scope of RCRA

EPA has never contended - and does not now contend - that burning of hazardous wastes as fuel is not within the jurisdiction

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15/ Boiler Workshop, supra at p. 90.

16/ Boiler Workshop, supra at p. 55. (Emphasis added).

of RCRA. 17/ "Subtitle C does not require EPA to consider resource recovery implications in establishing hazardous waste management standards; nor does it suggest that promoting resource recovery should take precedence over assuring proper management of hazardous wastes." 45 Fed. Reg. 33092 (1980).

The current proposal by EPA in the AMSA case envisions a case-by-case assertion of RCRA jurisdiction over boilers whenever wastes are being burned "in a manner insufficient to protect human health and the environment. . . ." Letter from Michael H. Dworkin, to AMSA counsel (March 11, 1982) containing proposed draft for Section 261.2(g)(1).

Thus, EPA continues to assert RCRA jurisdiction over waste burning as fuel, 18/ yet the Agency proposes to delay any application of RCRA to the practice for several years to come. Since there is little dispute on the need for regulation of

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17/ There is little support for the contention that hazardous wastes destined to be reused or recovered are not within the reach of Subtitle C. The heading of Subtitle C is "Hazardous Waste Management" which is specifically defined by the statute to mean "the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous wastes." Section 1004(7), 42 U.S.C. §6903(7). "Treatment" is also defined to include any process which renders hazardous waste "nonhazardous." Section 1004(34), 42 U.S.C. §6903(34). Congress assumed that wastes would have to be rendered nonhazardous prior to their re-use or use. "However appealing the resource recovery solution to the discarded materials problem may appear, other aspects of the problem, associated with the disposal of hazardous wastes, do not have the same attractive qualities. In order to solve this aspect of the problem the Committee recommends a regulatory approach." H. R. Rep. No. 94-1491-Part 1, 94th Cong. 2d. Sess. (1976), p. 4. See also 45 Fed. Reg. 33091 (1980) (wherein EPA adopts view that re-use activities are covered by Subtitle C).

18/ "While the thermal destruction of wastes in boilers or process devices is presently exempt from these regulations, EPA is still responsible for initiating the formulation of regulations to control industrial waste cofiring in boilers." Acurex Corp., supra January 1982, p. 4-1.

boilers, 19/ deferring regulation until further studies are completed will accomplish no relief. Burning of wastes will continue to injure public health and the environment:

> "we could mount this beaucoup of a million dollars testing and analysis plan, it could go on forever and never end up doing anything." 20/

Having conceded its legal authority to regulate and having made the factual determination that uncontrolled cofiring presents unacceptable risks, EPA must take immediate steps to bring this practice into the RCRA regulatory system. 21/

Obligation to Track Waste Disposition: Sec. 3002

In backing off of the initial reporting requirements for generators promulgated in May 1980, the Agency has reduced dramatically the cradle-to-grave tracking of hazardous waste called for by the statute. More specifically, EPA had a nondiscretionary duty to promulgate rules eighteen months after the effective date of the 1976 Act which would mandate that generators keep records "that accurately identify the quantities

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19/ The workshop in Cincinnati last year developed a broad-based consensus that current practices for disposal of wastes in boilers were not adequate to protect public health and the environment. Boiler Workshop, *supra* at pp. 62, 91 and 109. To achieve 99.99% destruction and removal efficiency, Acurex assumed a low waste feed rate (Acurex, *supra*, Jan. 1982, pp. 10-5; Acurex, *supra*, Oct. 1981, pp. 4, 42, 150) which bears little resemblance to industry practice under the exemption. *See* CMA survey, *supra* at p. 6. There is also little dispute that some wastes should be prohibited or restricted in cofiring units and that some boilers are unsuitable for this purpose. *See* Boiler Workshop, pp. 63, 77, 83, 106, 109 and 111-112.

20/ Boiler Workshop, *supra* at p. 107.

21/ Reliance on the Clean Air Act has been determined by EPA to be less effective that RCRA, which was chosen as "the primary vehicle for controlling air emissions from hazardous waste facilities." 45 *Fed. Reg.* 33173 (1980). The Clean Air Act does not now regulate nor could it forseeably regulate the hundreds of compounds emitted from uncontrolled waste burning. *See also* Boiler Workshop, *supra* at pp. 55, 87 and 98.

of . . . hazardous wastes generated, the constituents thereof . . . *and the disposition of such wastes.*" Section 3002 of RCRA, 42 U.S.C. §6932 (emphasis added).

The legislative history of Section 3002 fully supports the literal meaning of the language employed by Congress. Generators must record the disposition of all the hazardous waste generated at a facility. The floor manager noted in the House floor debates that the bill does "provide a system for . . . tracking [wastes] in commerce to their final disposition." 122 CONG. REC. 32597 (1976) (remarks of Rep. Rooney). The Senate report summarized the intent of the language to require "that all hazardous wastes must be accounted for from the point of generation and accompanied from that point to ultimate disposal by a manifest." S. Rep. No. 94-988, 94th Cong., 2d Sess. (1976) 14.

By broad exemptions, including burning of waste as fuel, EPA has frustrated the intent of the tracking system. The disposition of hazardous wastes in on-site boilers is a "common practice" which would be identified by records maintained by generators. The continuation of this loophole by allowing generators to covertly dispose of wastes in boilers violates a non-discretionary duty of the Administrator to require that generators record the ultimate disposition of all hazardous wastes.

Arbitrary and Capricious Distinction: APA §706

Regardless of the primary purpose of toxic waste burning, the practice remains within the scope of RCRA and the uniform standards should apply. Participants in EPA's boiler workshop last year raised "a strong and well-stated position that unless those regulations treat boilers and incinerators equitably, they're going to be doomed to failure right from the start." 22/ Since the basis for the 99.99% DRE for incinerators was that *it* was "necessary" to protect public health and the environment, it is difficult to decipher how boilers can be held to a lesser standard *without data or an administrative record to support the distinction.* 23/

The Council believes that the Administrator lacks the discretion to apply restrictions on one type of burning while indefinitely exempting another. *See Ass'n of American Railroads v. Costle,* 562 F. 2d 1310 (D. C. Cir. 1977) and cases cited in note 10 herein. To exempt boilers from notification under

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22/ Boiler Workshop, *supra* at p. 108. *See* also Boiler Workshop, *supra* at pp. 61, 66, 80, and 90.

23/ *See e.g.* cases cited in note 10 herein.

Section 3010 and from interim status requirements, such as record keeping and waste analysis, is not only unlawful but completely contradicts EPA's position with respect to other treatment, storage and disposal facilities. 24/

Mandatory Duty to Require Notification: Section 3010

Section 3010 (a) mandates that "[n]o identified or listed hazardous wastes subject to this subtitle may be transported, treated, stored or disposed of unless notification has been given . . . .25/ There is no dispute that hazardous wastes subject to Subtitle C are being burned as fuel in these facilities and that the facilities are subject to regulation under Section 3004. It is therefore necessary for EPA to require persons treating or disposing of toxic waste as fuel to file "a notification stating the location and general description of such activity and the identified or listed hazardous waste handled by such person[s]." Section 3010(a).

The failure to have promulgated regulations governing these facilities under Section 3004 does not affect the requirement that facilities notify under Section 3010. Such notification would entitle the facilities to operate with interim status subject to the same general interim status rules as other TSDFs. Absenct notification, it can be contended that boilers, kilns and process units burning hazardous wastes are illegally operating "without having obtained a permit under Section 3005 . . . ." Section 3008(d) (providing criminal penalties for knowing violations).

Interim Status Requirements: Section 3004

Once facilities burning hazardous wastes as fuel notify EPA and become interim status TSDFs, various interim status requirements should apply. The rationale for interim status has been described by EPA:

24/ As to other TSDFs, "EPA believes that these prospective permittees should at least comply with selected minimum requirements, under Section 3004 during interim status." 45 Fed. Reg. 33153 (May 19, 1980). *See* also 45 Fed. Reg. 33187 (1980) (rejecting the argument that the paperwork required is "unnecessary").

25/ 42 U.S.C. §6930(a) (Emphasis added).

> "The provision for interim status, to allow a smooth transition to full regulation under new national standards, allows owners and operators of existing facilities to continue to operate them until decisions on their permit applications are made." (45 Fed. Reg. 33158 (1980)).

During this transition, "EPA believes that these prospective permittees should at least comply with selected minimum requirements of Section 3004 during interim status." Id. at 33158. Appendix 1 sets out the interim status requirements which should be applicable to facilities using waste as fuel. 26/ These general facility standards include: waste analysis requirements, inspections, security, training, contingency plans, manifests, and other record keeping requirements. The Council also believes that the incinerator interim status requirements should apply; i.e. steady state operating requirement, waste analysis of BTU value, halogen, lead and mercury content, 27/ minimal monitoring and inspections requirements and removal of waste upon closure. See Subpart O, 40 C.F.R. §265. Obviously, any facility storing wastes prior to burning would also have to comply with storage requirements.

The most significant requirement would be waste analysis, but this is a minimal rule for safe operation of a cofired boiler. See Boiler Workshop, supra at p. 39. Some company representatives suggested this (Id. at 105) and in view of the known problems many wastes present it is an imperative requirement. 28/

A requirement for record keeping and waste analysis under interim status rules for boilers, kilns and process units burning wastes would provide a base for permit standards superior to that now contemplated by EPA's limited field testing program. Moreover,

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26/ Several participants in the boiler workshop noted "the need for some type of interim standards while [a] . . . data base is being developed." Boiler Workshop, supra at p. 109.

27/ See Boiler Workshop, supra at pp. 111-112. The analysis of waste to be burned could be expanded to include all "acutely hazardous" wastes identified in 40 C.F.R. §261.33(f). Burning of certain principal organic hazardous constituents (POHCs) could also be restricted for interim status facilities based on available health data and combustibility analyses.

28/ See Boiler Workshop, supra at pp. 63, 77, 83, 109, 111-112. A consensus generally existed, "that certain types of waste should be excluded from being put into boilers . . ." Id., p. 83.

the case-by-case regulation of boilers during the interim status period would be more effective, since actual information on possible abuses would be readily available. 29/ Thus, as actual problems developed at a facility burning wastes, EPA could "more on to the next stage by requiring submission of a Part B [application]." 45 Fed. Reg. 33322. The calling in of Part B applications could be based upon data contained in the Part A application, which must be submitted to obtain interim status. Requiring notifications and Part A applications would provide a reasonable vehicle for case-by-case regulation prior to development of final permitting rules.

Consequently, the imposition of interim status rules for facilities burning waste as fuel is critical for an orderly integration of the practice into RCRA. The importance of this result is not affected at all by the prospect that many fuel uses might eventually be permitted-by-rule. 30/ Until EPA has a sufficient factual record to justify such an approach, this sort of TSDF should be compelled to follow the same rules as any other.

29/ A failure to "track [wastes] . . . in commerce to their final disposition" would violate a fundamental purpose of the statute. *See* 122 Cong. Rec. 32597 (1976) (remarks of Rep. Rooney, floor manager of the bill). *Accord* S. Rep. No. 94-988, 94th Cong., 2d Sess. (1976), p. 3.

30/ The prerequisite to a permit-by-rule approach would be an adequate data base to distinguish types of wastes and boilers that may be compatible. Without detailed information on current practices, making this distinction would be difficult.

Conclusion

The Council contends that EPA has a duty under Sections 3004 and 3005 of RCRA to regulate all facilities that treat hazardous wastes. Boilers and process units which burn hazardous waste as fuel treat the waste precisely as incinerators treat it. The objective of encouraging energy recovery is not sufficient basis for the departure from basic statutory requirements and standards. Whatever approach is ultimately taken on permitting of boilers, EPA has a nondiscretionary duty to bring them into conformity with the RCRA immediately.

Sincerely,

Richard M. Hall

Marvin B. Durning
Randy M. Mott
Richard M. Hall
Scott Schwarz
Zuckert, Scoutt & Rasenberger
Attorneys for the
Hazardous Waste Treatment Council

cc: Attorney General of the United States

APPENDIX 1

PROPOSED AMENDMENT TO RULES (changes noted by underlining)

§261.2 Definition of solid waste

(a) A solid waste is any garbage, refuse, sludge or any other waste material which is not excluded under §261.4(a).

(b) An "other waste material" is any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from community activities which:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(2) Has served its original intended use and sometimes is discarded; or

(3) Is a manufactured or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(1) Disposed of; or

(2) Burned or incinerated, except where the material is being burned as a fuel for the purposes of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

§261.6 Special requirements for hazardous waste which is used, re-used, recycled or reclaimed.

(a) Except as otherwise provided in paragraphs (b) and (c) of this section, a hazardous waste which meets either of the following criteria is not subject to regulation under Parts 262 through 265 or Parts 122 through 124 of this Chapter and is not subject to the notification requirements of Section 3010 of RCRA until such time as the Administrator promulgates regulations to the contrary:

(1) It is being beneficially used or reused or legitimately recycled or reclaimed.

(2) It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or reuse or legitimate recycling or reclamation.

(b) Except as otherwise provided in paragraph (c) a hazardous waste which is a sludge, or which is listed in Subpart D, or which contains one or more hazardous wastes listed in Subpart D; and which is transported or stored prior to being used, re-used, recycled or reclaimed is subject to the following requirements with respect to such transportation or storage:

(1) Notification requirements under Section 3010 RCRA.

(2) Part 262 of this Chapter.

(3) Part 263 of this Chapter.

(4) Subparts A, B, C, D and E of Part 264 of this Chapter.

(5) Subparts A, B, C, D, G, H, I, J and L of Part 265 of this Chapter.

(6) Parts 122 and 124 of this Chapter, with respect to storage facilities.

(c) A hazardous waste which is burnt in a boiler or cement kiln either directly or after being mixed with oil or other combustable materials, is subject to the notification requirement of Section 3010 of RCRA and Part 262 through 254 and Parts 122 through 124 of this Chapter. The mixing of a hazardous waste with oil or other combustable materials, so as to render such waste amenable for energy recovery, is not a beneficial use or reuse for purposes of this section and, therefore, is also subject to the notification requirements of Section 3010 of RCRA and Parts 262 through 265 and Parts 122 through 124 of this Chapter.

§260.10

"boiler" means all enclosed devices using controlled flame combustion, the primary purpose of which is to burn material for the recovery of the thermal value of such material.

"cement kiln" means all enclosed devices using control flame combustion the primary purpose of which is to process material so as to produce cement.

§265

Subpart S - Boilers and Cement Kilns [new subpart]

§265.460 - Applicability

The regulations in this Subpart apply to owners and operators of facilities that treat hazardous waste in boilers and cement kilns, except as §265.1 provides otherwise.

§§265.461-265.462 [Reserved]

§265.463 General operating requirements

Before adding hazardous waste, the owner or operator must bring his boiler or cement kiln to steady state (normal) conditions of operation -- including steady state operating temperature and air flow -- using auxiliary fuel or other means.

§265.464 [Reserved]

§265.465 Waste analysis

In addition to the waste analyses required by §265.13, the owner or operator must sufficiently analyze any waste which he has not previously burned in his boiler or cement kiln to enable him to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

(a) Heating value of the waste;

(b) Halogen content and sulfur content in the waste; and

(c) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

[Comment: As required by §265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§265.466 [Reserved]

§265.467 Monitoring and inspections

(a) The owner or operator must conduct, as minimum, the following monitoring and inspections when incinerating hazardous wastes:

(1) Existing instruments which relate to combustion and emission control must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state combustion conditions must be made immediately either automatically or by the operator. Instruments which relate to combustion and emission control would normally include those measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH, and relevant level controls.

(2) The stack plume (emissions) must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return visible emmissions to their normal appearance.

(3) The complete boiler or cement kiln and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operations.

§§265.468-265.470 [Reserved]

§265.471 Closure

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the boiler or cement kiln.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with §265.3(c) or (d) of this Chapter, that any solid waste removed from his boiler or cement kiln is not hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this Chapter.]

§§265.472-265.489 [Reserved]

International Fabricare Institute
12251 TECH ROAD • SILVER SPRING, MD 20904 • (301) 622-1900

June 30, 1982

The Honorable John H. Chafee
Chairman,
Senate Environmental Pollution Subcommittee
U.S. Senate
5229 Dirksen Senate Office Building
Washington, DC 20510

Dear Mr. Chairman:

Enclosed are the comments of International Fabricare Institute regarding the possible reduction of the small generator exemption level under RCRA. We ask that these comments be entered in the hearing record.

Thank you.

Sincerely,

Charles R. Riggott

Charles R. Riggott,
Executive Vice President
and General Manager

CRR:hw

Enclosures

RESEARCH AND EDUCATION CENTER FOR THE PROFESSIONAL FABRICARE INDUSTRY

International Fabricare Institute

12251 TECH ROAD • SILVER SPRING, MD 20904 • (301) 622-1900

SUMMARY OF EFFECTS ON RETAIL DRYCLEANING OF A REDUCTION OF THE SMALL GENERATOR EXEMPTION TO 100 KG/MONTH

I. General Effect of Exemption Reduction

- 98.9% of hazardous waste currently covered at 1000 kg/month.
- Only 0.8% additional waste covered with drop to 100 kg/month.
- Additional 132,000 businesses affected.

II. Effect on Retail Drycleaning Stores - SIC 7216

- Estimated 20,000 plants affected (80% of 25,000 total retail drycleaners).
- Average retail store sales revenue $140,000 annually.
- $4,200 average net profit, before Federal taxes.
- Estimated $4,300 - $7,200 additional annual costs for full RCRA controls.
- Average store generates 125 kg/month covered waste, 56% of which is inert materials.

International Fabricare Institute
12251 TECH ROAD • SILVER SPRING, MD 20904 • (301) 622-1900

June 30, 1982

COMMENTS SUBMITTED BY THE
INTERNATIONAL FABRICARE INSTITUTE

TO
THE SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION
OF THE SENATE COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
ON THE RESOURCE, CONSERVATION AND RECOVERY ACT

We understand that the Committee, as part of its consideration of possible amendments to the Resource Conservation and Recovery Act (RCRA), will be reviewing the current exemption from the hazardous wastes regulations for generators of less than 1,000 kg/month of hazardous waste.

As the world's largest trade association of drycleaning establishments, the International Fabricare Institute is concerned about the possibility of a reduction in the small generator exemption level to 100 kg/month, since approximately 80% of the retail drycleaning operations in the U.S. would be severely affected by such a reduction. Accordingly, we urge the Committee not to reduce the current small generator exemption level. IFI and its members are concerned about public health and welfare and potential damage to the environment. Yet we believe that only marginal benefits will be obtained by reducing the small generator level to 100 kg/month.

RESEARCH AND EDUCATION CENTER FOR THE PROFESSIONAL FABRICARE INDUSTRY

When these benefits are compared with the significant adverse economic impacts on drycleaners (and perhaps others), it is apparent that such benefits can be obtained only at an exceedingly high cost.

The International Fabricare Institute has a membership of approximately 10,000 establishments, the majority of which are retail drycleaning operations in the United States. See Attachment A for a more detailed description of IFI's membership and functions. Through our direct membership and the members of allied state and local associations, our comments here are on behalf of the approximately 25,000 retail drycleaning stores throughout the country. Of those, an estimated 20,000 would be affected by a reduction in the small generator exemption level.

The Environmental Protection Agency has documented the serious consequences that would occur as a result of reducing the small generator exemption level. As shown in "Economic Impacts of RCRA Approaches to the Regulation of Generators of Small Volumes of Hazardous Wastes," a reduction from a 1,000 kg/month level to 100 kg/month would affect approximately 132,000 businesses, yet would achieve only an 0.8% improvement in the control of wastes regulated under RCRA. See pages I-4 and IV-6 of Attachment B. As will be shown below, this disparity between costs and benefits of reducing the generator exemption level would have a particularly acute impact on the drycleaning industry

The principal reason that so many of our members would be affected lies in the nature of commercial drycleaning. Three different solvents are used: perchloroethylene (a "listed" waste), petroleum solvent (which may be an "ignitable" waste), and fluorocarbon 113 (a non-hazardous waste). Currently, these solvents are used by 75%, 24% and 1%, respectively, of the retail drycleaners in the United States. The equipment in any individual drycleaning plant may be used only with the solvent for which it was designed. Further, the drycleaning operations which produce wastes cannot be altered to reduce the volume of waste produced. This inability to alter the drycleaning process at a given plant must be kept in mind when examining the severe economic harm that would result in our industry if the small generator exemption level were reduced.

Based on extrapolations of the 1977 U.S. Census of Service Industries Statistics, the average retail drycleaning plant has gross sales revenue of approximately $140,000. According to annual operating costs surveys run by IFI, the net profitability before Federal taxes for a plant of this size would be approximately $4,200 annually. See Attachment C.

Using these figures, one can determine the amount of waste generated by the average drycleaning plant. The average plant with $140,000 of annual sales would, according to our operating costs survey statistics, clean approximately 1,400 pounds per week, depending on the particular type of solvent and filtration/distillation equipment used. The rate of total hazardous waste production would range between 22-57 pounds of waste per 1,000 pounds of garments cleaned, with a weighted average of 46 pounds of waste per 1,000 pounds of garments cleaned. Thus the average plant cleaning 1,400 pounds of garments per week would produce 64 pounds of waste per week, or 275 pounds (125 kg) per month. See Attachment F.

Though most of the waste produced by such a plant would be inert materials, a reduction in the small generator exemption level to 100 kg/month would require the average drycleaning plant to incur the added costs of meeting hazardous waste disposal requirements. According to hazardous waste haulers contacted in suburban Maryland an average $300 minimum pick-up charge, plus $30 per DOT 17E drum, would be required. An operation using a powder type filter would need one 30-gallon drum per month, while the average plant using cartridge filtration--which is the most prevalent type used in the industry today (77%) -- would use six cartridges per month, each of which would require a separate container for disposal. Using data from Montgomery County, Maryland as a basis for comparison, the estimated cost for disposal of listed hazardous wastes from these typical plant types ranges from $4,300 to $7,200 annually. Thus, most plants would incur significantly higher disposal costs.

The true effect of this increase in costs cannot be understood unless it is compared to the profitability of the drycleaning industry. According to the EPA study discussed above, plants of any kind that cannot pass compliance costs through to customers will be forced to cease operations. The strongest indicator of a substantial likelihood of plant closure is a low level of annual sales. Since the average retail drycleaning plant has a low gross sales revenue level of approximately $140,000 and a low profit level of $4,200 (which is less than the estimated disposal cost of $4,300 to $7,200 annually under a 100 kg/month level), the increased costs caused by reducing the small generator exemption level could lead to a dramatic amount of plant closures in the drycleaning industry. (See page II-37 of Attachment D). The low annual sales, low profitability and price inelasticity for the drycleaning industry are well documented in the U.S. EPA Background Information Documents for Control of Solvent Emissions From Dry Cleaning Plants.

While process modification may be possible in some industries, a retail drycleaning store cannot by altering its cleaning process further reduce its volume of wastes. In fact, these wastes are already controlled with respect to maximum solvent content as a potential air pollutant under existing or upcoming RACT and NSPS for drycleaning stores (Attachment E). Further, as is shown by the tables in Attachment F, the average retail drycleaning plant could not avoid the added disposal costs (and thus avoid closure) simply by attempting to reduce the volume of garments brought in by customers. To fall within a reduced small generator exemption level many drycleaners would have to reduce their volume to approximately 890 pounds of garments per week. Given the low net profitability for the average plant at 1,400 pounds of garments per week, it is simply unrealistic to assume that such a plant could maintain operations at the even lower level of 890 pounds per week. Moreover, customers would not cease drycleaning articles, but would take these to other stores, thereby distributing but not reducing waste generated.

For all these reasons, IFI is very concerned about any possible reduction in the small generator exemption level. Our concern is increased by comparing these costs to anticipated benefits; in return for these drastic impacts on the drycleaning industry (and other industries), only minimal environmental benefits would be obtained. As mentioned earlier, EPA has found that reducing the small generator exemption level to 100 kg per month for all industries would achieve only 0.8% additional control of solid wastes. Accordingly, we ask the Committee to oppose any reduction of the small generator exemption level under RCRA.

We would be happy to answer any questions you may have on the drycleaning industry. Please feel free to contact us.

INTERNATIONAL FABRICARE INSTITUTE

Charles R. Riggott

Charles R. Riggott,
Executive Vice President
and General Manager

CRR:hw
Attachments

WILLIAM V. ROTH, JR., DEL., CHAIRMAN

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United States Senate
COMMITTEE ON
GOVERNMENTAL AFFAIRS
WASHINGTON, D.C. 20510

June 22, 1982

Honorable George J. Mitchell
Ranking Minority Member
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear George:

Enclosed please find a statement prepared by Mr. J. Patrick Nicholson, the Chief Executive Officer of N-VIRO Energy Systems, Ltd., of Toledo, Ohio.

I am writing to request that Mr. Nicholson's statement in reference to the Environmental Protection Agency's compliance with Section 6002 of the Resources Conversation and Recovery Act be included in the Environmental Pollution Subcommittee's hearing scheduled for the afternoon of Thursday, June 24, 1982, on proposed amendments to S.2432.

Any attention your subcommittee can give to Mr. Nicholson's statement on this matter will be appreciated.

With best regards.

Sincerely,

John Glenn

John Glenn
United States Senator

Enclosure
JG/dd

RESOURCE CONVERSATION AND RECOVERY ACT of 1976
Section 6002: EPA's Compliance.

The Federal Register Volume 45, Number 225 of Thursday, November 20, 1980 contained the following statement from the EPA:

"The EPA is today proposing the first of a series of guidelines designed to encourage the use of products containing recovered materials. Section 6002 of the Solid Waste Disposal Act, as amended by the Resources Conservation and Recovery Act of 1976, as amended ("RCRA" or "ACT") 42 USC 6962, requires Federal, state, and local procuring agencies using Federal funds to purchase items composed of the highest percentage of recovered materials practicable. EPA is required to prepare guidelines to assist procuring agencies in complying with the requirements of section 6002.

Requirements of Section 6002

Section 6002 Of the Act, entitled Federal Procurement, directs all procuring agencies which use appropriated Federal funds to procure items containing the highest percentage of recovered materials practicable, given that reasonable levels of competition cost, availability, and technical performance are maintained.

Procuring agencies are also required to review and revise specifications for products in order to eliminate any discrimination against the use of recovered materials. They are to remove specifications requiring that items be manufactured from virgin materials, and remove prohibitions against the use of recovered materials.

Section 6002 gives the Environmental Protection Agency responsibility for promulgating guidelines to assist procuring agencies in carrying out these requirements and (in conjunction with the Office of Federal Procurement Policy in the Executive Office of the President) for implementing the policy and program at all levels of government".

In evaluating waste utilization opportunities, the EPA relied upon a number of consultant reports. Four reports of particular value were:

1. Consultant: Arthur D. Little Inc., "Can Federal Procurement Practices Be Used To Reduce Solid Waste", 1973.
2. Consultant: Resource Planning Assoc., Inc., "Study of the Feasibility of Requiring Secondary Materials in Federal Construction".

3. Consultant: Southwest Research Consultants, Department of Energy Contract #EC77-C-03-1699 on energy conservation through the use of recycled materials.
4. Consultant: Franklin Associates, Ltd., and Valley Forge Laboratories, Inc.; " EPA's Development of Guidelines for Procurement of Highway Construction Products Containing Recovered Materials", EPA Contract 68-01-6014.

Other than the one proposed guideline of November 20th, 1980, which is still awaiting final action, today, six years after final passage of RCRA, EPA has yet to issue a single guideline and is making no apparent effort to develop their own consultant's recommendations. This lack of action is directly contradictory to the 1980 amendments which required EPA to issue at least three final guidelines by May 1981, and two additional guidelines including one on construction materials by Sept. 30, 1982.

I am particularly concerned that EPA has failed to pursue the opportunity endorsed by their consultant in report 68-01-6014. This report clearly shows that the use of fly ash, a utility waste material, as a substitute for petroleum based asphalt is cost effective, energy conserving, and environmentally sensible.

Industry sources are prepared to document and support that the use of lime-fly ash-aggregate and kiln dust-fly ash-aggregate base systems in leiu of bituminous concrete (a petroleum derivitive) will usually result in a savings per mile on a 24 foot wide pavement of:

1. At least $30,000 in construction cost,
2. At least 100,000 gallons of oil,
3. Utilization of at least 2,500,000 lbs. of recycled materials.

These figures are greatly supported in the EPA's own consultant's report (EPA 68-01-6014, listed earlier). For example, the consultant's report page 5-38 estimates that in Washington D.C., the cost of fly ash base would be $3.58 per square yard less expensive than a comparable asphalt base.

Congressman Weber of the 9th District of Ohio recently requested information from EPA on the Section 6002 guidelines, particularly the road base guideline. The EPA responded thusly,

"We agree with Mr. Nicholson's assessment that reuse of these materials can result in significant economic, energy, and environmental savings. As he states, EPA has expended resources in attempting to develop such guidelines. The Agency sponsored a study which investigated the technical and economic issues surrounding the use of highway construction products containing recovered materials. Included in this study were fly ash road base and sub-base materials.

Unfortunately, since mid-1981, further efforts to develop a guideline for fly ash road base materials have been deferred. Of necessity, available resources have been assigned to those program activities related to the treatment, storage, and disposal of hazardous waste and industrial wastes - a higher priority program effort. The health and environmental consequences of the continued improper management of hazardous waste must be of highest concern at the present time, although recovery and reuse of these materials may be the most desirable long-range, solid waste management alternative. Thus, EPA feels this reallocation of existing limited resources is justified".

Based on 1980 figures, the substitution of fly ash bases for the 16,000 miles of asphalt bases constructed in the United States could have resulted in an annual cost savings over $500,000,000.00; a savings of over 35,000,000 barrels of oil; and a waste utilization of over 20,000,000 tons of recycled materials. With that potential, EPA is making a terrible mistake in not developing these guidelines, as well as not conforming to their responsibilities as mandated by Congress in RCRA, Section 6002.

Industry sources all confirm that the Department of Transportation is doing everything within their authority to encourage waste utilization in general and fly ash utilization in particular (DOT Demo 59, DOT/DOE Kiln Dust-fly ash evaluation program). However, responsibility for developing and implementing recycled guidelines was given clearly to EPA. It is their responsibility to act and to act now!

WILLIAM V. ROTH, JR., DEL., CHAIRMAN

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United States Senate
COMMITTEE ON
GOVERNMENTAL AFFAIRS
WASHINGTON, D.C. 20510

June 23, 1982

Honorable George J. Mitchell
Ranking Minority Member
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear George:

Enclosed you will find two documents which Mr. J. Patrick Nicholson of Toledo, Ohio, intended to accompany his statement in reference to EPA compliance with Section 6002 of the Resources Conservation and Recovery Act, which I submitted to you by letter dated June 22, 1982. I would appreciate if Mr. Nicholson's testimony could be accompanied by these additions at your hearing on Thursday.

With best regards.

Sincerely,

John

John Glenn
United States Senator

Enclosures (2)
JG/dd

N-VIRO

N-Viro Energy Systems Ltd.

December 2, 1981

Ms. Jeanne Miller
Administrative Assistant
Office of CONGRESSMAN ED WEBER
512 Cannon Building
Washington D. C.   20515

Dear Jeanne,

First of all, my sincere thanks for the time and interest you gave me during my recent visit to Washington. N-Viro Energy Systems' primary objective is the responsible use of recycled materials to economically replace energy-intensive materials particularly petroleum. Thus we are totally supportive of the comments made by Congressman Weber in his letter of November 21, 1981. This country can and must drastically reduce its dependence on foreign oil and its subservience to the American oil lobby.

In 1976 during the Ford administration, Congress passed the Resource Conservation and Recovery Act (RCRA), also known as the Solid Waste Disposal Act. A significant part of that important regulation was Section 6002 which dealt with waste utilization and the role of the federal government in encouraging the same. This legislation directed the Environmental Protection Agency to develop guidelines for the "responsible use" of recycled materials.

In evaluating waste utilization opportunities, the EPA relied upon a number of consultant reports. Three reports of particular value were:

1. Consultant: Arthur D. Little Inc., "Can Federal Procurement Practices Be Used To Reduce Solid Waste", 1973.
2. Consultant: Resource Planning Assoc., Inc., "Study of the Feasibility of Requiring Secondary Materials in Federal Construction.
3. Consultant: Southwest Research Consultants, Department of Energy Contract #EC77-C-03-1699 on energy conservation through the use of recycled materials.

From these studies and other internal efforts, the EPA began developing a number of guidelines relative to the use of fly ash - the waste product resulting from the burning of coal by the electric utilities. On November 20, 1980, the first effort by the EPA in developing a fly ash guideline ("The Use of Fly Ash as a Cement Replacement in Portland Cement Concrete")

3450 West Central Avenue   Suite 250   Toledo, Ohio 43606   Telephone: 419/535-6374

was published in the Federal Register. Public hearings were held on January 7, 1981. Yet to date, no final guidelines have been developed or published. On May 7, 1979, the EPA advertised for bids on a consultants report to study the use of lime/fly ash and kiln dust/fly ash aggregate base systems as a replacement for asphalt (a petroleum based product) in highway construction. Contracts were awarded to Franklin Associates Ltd., of Kansas City and Valley Forge Incorporated of Devon, Pennsylvania. In July of 1981 the consultants report on these fly ash base systems was submitted to the EPA (EPA Contract 68-01-6014). To our knowledge and to the best information of both the National Ash Association and the American Pozzolanic Concrete Association, (two non-profit organizations committed to the use of fly ash bases) there has been little if any progress at EPA relative to the development of fly ash base guidelines. In other words, the EPA since the passage of RCRA has spent considerable dollars and effort in developing a network of information on both the practical and technical reasonableness of encouraging the use of fly ash, but has suddenly ceased making any appreciable effort toward either of these two major fly ash utilization opportunities (a. fly ash used as a replacement for cement; b. fly ash as a binder with lime or kiln dust in highway construction).

Our sources indicate that a guideline on the initial fly ash effort (fly ash used as a cement replacement) may soon be announced, but no activity is currently taking place toward the second fly ash guideline (EPA 68-01-6014).

The EPA has already spent most of the resources required to research and develop the two fly ash guidelines. It would be tragic for the EPA to terminate or delay these efforts when they are so close to fruition. Industry sources are prepared to document and support that the use of lime/fly ash and kiln dust/fly ash aggregate base systems in lieu of asphalt systems will result in a savings per mile on a 24 foot wide pavement of:

1. at least $50,000.00 construction cost,
2. at least 100,000 gallons of oil,
3. and, utilization of at least 2.5 million pounds of recycled material.

These figures have been documented in the EPA's consultants report (EPA 68-01-6014). This guideline effort is now apparently delayed due to a shift in emphasis at EPA away from waste utilization and back to a review evaluation of waste disposal practices and procedures. We urge that no delay or dilution of EPA's efforts to develop responsible waste utilization guidelines be accepted. In 1976 Congress correctly recognized the great opportunity that responsible use of recycled materials offered our country. The challenge of the 80's requires a dedication toward reduction of unnecessary public expense, a reduction of unnecessary use of imported oil, and a responsible approach to effective waste disposal costs, with one excellent way being effective waste utilization.

Every effort must be made to encourage and support EPA in their efforts to develop responsible waste utilization guidelines.

Sincerely yours,

Pat Nicholson

J. Patrick Nicholson
Chief Executive Officer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 29 1982

OFFICE OF
THE ADMINISTRATOR

Honorable Ed Weber
House of Representatives
Washington, D. C. 20515

Dear Mr. Weber:

Administrator Anne Gorsuch has asked me to respond to your letter of December 16, 1981, and your referral of correspondence from Mr. J. Patrick Nicholson, Chief Executive Officer of N-Viro Energy Systems, Ltd., of Toledo.

Mr. Nicholson is interested in EPA's program to develop guidelines for government procurement of recycled products. Specifically, Mr. Nicholson expresses concern about EPA not having published final guidelines relating to the use of fly ash used as a base material in highway construction.

The Agency is completing the work on the "Guidelines for Federal Procurement of Cement and Concrete Containing Fly Ash," which was proposed in the Federal Register on November 20, 1980. We anticipate publication of the final guideline in March. Many members of the construction industry are eagerly awaiting the issuance of this guideline. We believe one result will be to increase competition and business opportunities for those persons who are willing and able to use fly ash in cement and concrete, but who are often precluded from bidding because fly ash is typically not allowed in construction contract specifications.

However, the fly ash guideline mentioned is not the one with which Mr. Nicholson is most interested. He urges development of a guideline for the use of fly ash in combination with lime and cement kiln dust to be used as a base, or subbase, material in highway construction.

We agree with Mr. Nicholson's assessment that reuse of these materials can result in significant economic, energy, and environmental savings. As he states, EPA has expended resources in attempting to develop such a guideline. The Agency sponsored a study which investigated the technical and economic issues surrounding use of highway construction products containing recovered materials. Included in this study were fly ash road-base and sub-base materials. !!

Unfortunately, since mid-1981, further efforts to develop a guideline for fly ash road-base materials have been deferred. Of necessity, available resources have been assigned to those program activities related to the treatment, storage, and disposal of hazardous and industrial wastes—a higher priority program effort. The health and environmental consequences of the continued improper management of hazardous waste must be of highest concern at !!

the present time, although recovery and reuse of these materials may be the most desirable, long-range, solid waste management alternative. Thus, EPA feels this reallocation of existing, limited resources is justified.

In addition, the Agency is now engaged in a complete reassessment of its regulatory program for hazardous waste management in response to Executive Order 12291 and directives from the Office of Management and Budget (OMB). Regulatory Impact Analyses are currently being performed for all phases of the existing regulatory program. These analyses will continue throughout 1982. In the meantime, it is not anticipated that Agency personnel will be available to work on the guideline for fly ash road-base materials, as Mr. Nicholson desires.

Pending issuance of a formal guideline for fly ash road-base materials, the study report which EPA sponsored in support of this effort is available to interested persons by ordering publication number PB 82-110669 from:

National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, Virginia 22161

Many members of the construction industry have indicated that the forthcoming guideline for fly ash use in cement and concrete will be immensely useful in promoting all uses of fly ash, including road base construction. Although different technical and economic issues apply in each situation, these people feel that if the Federal Government simply officially acknowledges fly ash as a legitimate material of construction, more widespread use in all applications will be encouraged. We sincerely hope this will prove to be true, pending Agency development of application-specific guidelines in the future.

I hope this information will be helpful. If we can be of any further assistance, please let us know.

Sincerely yours,

/S/

Jack Woolley
Director
Office of Congressional Liaison

KEY PERSON AT EPA:
Rita La Vella !!

FINAL REPORT

DATA COLLECTION AND ANALYSES PERTINENT TO EPA'S DEVELOPMENT OF GUIDELINES FOR PROCUREMENT OF HIGHWAY CONSTRUCTION PRODUCTS CONTAINING RECOVERED MATERIALS

VOLUME ONE
ISSUES AND TECHNICAL SUMMARY

EPA Contract 68-01-6014

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Solid Waste (WH-565)
Washington, D.C. 20460
Attention: Mr. William J. Kline

By

FRANKLIN ASSOCIATES, LTD.
Robert G. Hunt
Larry E. Seitter

VALLEY FORGE LABORATORIES, INC.
Robert J. Collins
Richard H. Miller
Benjamin S. Brindley

July 6, 1981

Chapter 1

INTRODUCTION

BACKGROUND

In the eleven years since the passage of the Resource Recovery Act of 1970, EPA has devoted much of its resources to the area of making recovered materials more readily available from waste streams. A wide range of possibilities have been explored, which include voluntary source separation programs to resource recovery from solid waste by technologically sophisticated plants. Much emphasis has been on the "supply-push" concept which assumes that abundantly available raw materials derived from waste will be more economical for industrial users than virgin materials.

In the more recently passed Resource Conservation and Recovery Act of 1976, as amended, however, there is a mandate from Congress for EPA to explore the possibility of the "demand-pull" side of recovered materials markets. The concept is that Federal procurement can provide leadership in creating a market for products utilizing materials recovered from waste streams.

In order to carry out this mandate, EPA has matched components of solid waste with products that the Federal Government purchases. EPA has been mandated to provide a mechanism through which the government can create demand for the materials recovered from waste streams through the product procurement process.

The plan to do this will proceed in stages. First, a data base must be assembled on the recovered material-product matchups to determine how appropriate procurements can proceed within the confines of the four "reasonables"--competition, cost, availability, and technical performance. The data base will then be used to write guidelines for the procurement processes. EPA will then assist procuring agencies at all levels of government in implementing the guidelines.

OBJECTIVE OF THIS STUDY

The primary objective of this study is to prepare a base of quantitative and qualitative information relating to the writing of guidelines for government procurement of four categories of recovered materials which are suitable for use in highway construction products: power plant ash, cement and lime kiln dusts, rubber tires, and incinerator residue. Specifically, the following kinds of information are to be provided to EPA:

1. Commercial availability of products containing recovered materials.

2. Indirect capacity to produce and supply those products.
3. Procuring agency demand.
4. Price ranges for products containing recovered materials.
5. Technical performance assessment.
6. Certification procedures.
7. Analysis of environmental, economic, and energy effects.
8. Assessments on a state-by-state basis of the past and present use or consideration of use of products containing recovered materials.

This information was assembled and analyzed for EPA by the contractors. The results of the analysis is a set of guideline options available to EPA. Advantages and disadvantages of the various options are presented, but no recommendations are made by the contractors.

RESEARCH PLAN

The objectives of this study were met by using a variety of research techniques. Most important were personal interviews with knowledgeable people, supplemented by library research. People contacted included employees of the Federal government, state and local governments, private companies, and trade associations.

The Federal agencies contacted included the Department of Transportation, Federal Highway Administration (FHWA), which is the key Federal agency concerned with highway construction products. Other agencies contaced are the Bureau of Indian Affairs, Forest Service, Army Corps of Engineers, Bureau of Land Management, National Park Service, and the Federal Aviation Administration. Numerous other direct personal interviews included eight state departments of transportation, trade associations representing all of the major supplier industries, contractors, individual suppliers, and many others. The American Association of State Highway and Transportation Officials was especially helpful, in that a survey of recovered material use in highway construction in each of the fifty states was conducted by the Association and the results made available for this study. All of these individuals and organizations provided information and insight in relation to the objectives previously stated.

EXECUTIVE SUMMARY

Introduction

The primary purpose of this report is to provide EPA with an information base to assist in the consideration and development of procurement guidelines. This summary is an overview of the factual material presented in this report. However, it is not possible to succinctly summarize the advantages and disadvantages of various procurement guideline options because of the complexities involved. The reader is referred to Chapters 5, 6, 7, and 8 for a discussion of guideline options for each product considered.

Magnitude of Highway Construction Markets and Potential Federal Influence

One of the first issues to be considered is whether a given class of products constitutes a significant market. If not, then Federal procurement guidelines would not be useful. Also, it needs to be determined if the potential Federal influence is significant for that market.

The recovered materials considered in this report are potential replacements for hot-mix asphalt paving, or for aggregates (including crushed stone, sand, and gravel). During the period 1970-1978, hot-mix asphalt paving was produced at an annual rate ranging from a low of 292 million tons in 1976, to a high of 376 million tons in 1978. It is projected that by 1988, the production will grow to nearly 400 million tons. In 1978 the estimated value was 4.6 billion dollars. Over the period 1970-1979, aggregate products for use in highway construction was nearly 1 billion tons each year. Both of these materials are commonly used in highway construction throughout the entire country, and clearly constitute significant markets.

The potential of Federal involvement in these markets is considered in two categories--direct Federal purchases, and Federal aid purchases. In terms of total highway construction expenditures, 87 percent of purchases in 1978 were made with Federal aid money. This year was typical. All fifty states use Federal aid money for highway construction, and in six states, virtually all highway construction was with Federal aid money. Only in one state is the level as low as 30 percent. For forty-nine states the share is 70 percent or higher. Thus, the potential of the Federal influence in highway construction markets is quite significant.

The direct Federal program is only about 1/23 of the size of the Federal aid program, and therefore is not potentially as important as the Federal aid program.

but this nearly doubled to 75 million tons in 1979. At present, about 11 million tons of power plant ash is being recovered for reuse in commercial products. Almost all power plant ash is generated in the region of the country east of the Mississippi, with about half of the ash being generated in six states--Ohio, Pennsylvania, Illinois, Indiana, Kentucky, and West Virginia.

In this study, five products containing power plant ash were considered:

1. Fly ash as a mineral filler in bituminous pavements
2. Power plant aggregates in base courses or in bituminous paving material
3. Fly ash in structural fills
4. Fly ash in stabilized base course materials
5. Cement stabilized fly ash bases and sub-bases

Only fly ash in stabilized base course materials was considered in depth in this study. While the other products have potential uses, they are less likely to result in widespread application and their use will be much less effective in alleviating the power plant ash solid waste problem.

Fly Ash in Stabilized Base Course Materials. The material considered here was lime-fly ash aggregate (LFA) mixtures used as a base course under bituminous (asphalt) pavements. The following conclusions were drawn concerning this material.

1. FLA has been used in this country since 1950, particularly in three states--Illinois, Ohio, and Pennsylvania. In 1979, 738,000 tons of LFA was produced, using 89,000 tons of fly ash, or 0.2 percent of the total fly ash generated. The maximum theoretical potential use of fly ash in LFA nationwide is about one-quarter of all fly ash produced.

2. Fourteen states have used LFA on at least a limited basis, and four others are presently evaluating LFA in their laboratories. One company in the Kansas City area produces a pre-blended product, in which the lime and fly ash are blended and stored prior to mixing with aggregate.

3. Assurance of quality control is a critical aspect of a successful LFA installation. This includes quality control of the fly ash and other raw materials, as well as in the production and installation of the base.

4. Eight advantages to the use of LFA were found.

   a. It is lower in cost in places where it is presently used.
   b. Strength develops in the material over long periods of time.

c. Ultimate strength is comparable to a low strength concrete.
d. LFA bases are relatively easy to install, requiring no specialized equipment.
e. Structural design coefficients are equal to or nearly equal to those of bituminous base, and substantially higher than crushed aggregate.
f. Use of LFA helps alleviate a solid waste problem.
g. LFA pavements rarely fail from fatigue.
h. LFA contains fly ash, which is a low energy-intensive material and its use helps conserve petroleum resources.

5. Four disadvantages to the use of LFA were found.

a. LFA cannot be installed during cold weather, thus reducing the construction season.
b. LFA may not be suitable for reconstruction projects where maintenance of heavy traffic is important.
c. Quality control must be stringently observed.
d. Many engineers view fly ash as a waste, not a product, and are therefore reluctant to specify its use.

6. Both guide specifications and state specifications for routine use exist.

7. It would appear that the use of LFA produces potentially significant solid waste and energy benefits when compared to asphalt concrete. However, the dust problem created by materials handling may cause some adverse impact in terms of air quality. Water pollution is not significant, and the processing wastes generated are not important in view of the considerable alleviation of solid waste resulting from the use of fly ash. There is no indication that there is a potential problem arising from leaching of toxic constituents from LFA.

8. In objectively weighing the advantages versus the disadvantages of LFA base materials, on balance, the good points of this material definitely outweigh its bad points. It is a proven fact that, if this material is designed, produced, and placed properly, it performs well. It is a versatile product, having been produced with almost every kind of aggregate and dozens of different sources of fly ash. The obvious advantage that LFA base offers in dramatic cost savings is, in and of itself, a compelling reason enough to justify widespread use of this mateiral. Therefore, from a technical and economic standpoint, use of LFA base is not only justifiable, but also very beneficial.

Use of Kiln Dusts in Highway Construction Products

Kiln dusts are the product of air pollution control in cement and lime plants. These dusts result from the heating of limestone to produce lime, or from the heating of portland cement raw materials (limestone, silica, alumina, and iron oxide) to produce a cement clinker. The kiln dusts vary in chemical composition, but have a high calcium composition and resemble finely divided lime or cement in appearance. Currently, 10 to 14 million tons of kiln dusts are being disposed of annually. This is clearly a significant national solid waste problem, but is only about one-fifth the volume of power plant ash.

Cement and lime plants are located throughout the U.S., so that kiln dust generation is more uniformly distributed than power plant ash. However, production in five states--California, Texas, Missouri, Michigan, and Pennsylvania--account for 44 percent of the national total.

Kiln dusts have only become a significant waste problem in the past ten years, largely because stringent pollution control measures were not widely used previously. Thus, markets are just beginning to be developed for kiln dusts. In this study, the focus was on kiln dusts as a replacement for lime in stabilized base materials. However, kiln dusts can frequently be used as a lime replacement in a variety of relatively minor highway construction applications, such as use as a soil stabilizer.

The following conclusions were reached concerning the use of kiln dusts as a replacement for lime in stabilized base materials (kiln dust-pozzolan-aggregate mixtures).

1. At the present time this product is patented, and licenses are currently being made available to manufacture and install this product. The lack of commercial availability would create serious problems for a guideline written to encourage widespread use right now. However, this product will likely be widely available in the near future.

2. Quality control of kiln dusts is a critical problem because of changes in raw material and changes in plant operation at cement and lime kilns can cause unacceptable variations in kiln dust composition. However, frequent testing of dusts and close cooperation between dust consumers and plant operating personnel can result in a high quality product.

3. Only five field tests have been installed, with no large commercial applications to date. However, a comprehensive testing and evaluation program has been recently initiated by the Federal Highway Administration.

4. Tests have been performed to define technical parameters of kiln dust-fly ash-aggregate mixtures. The laboratory data, which is mostly compressive strength testing of various compositions, shows a striking similarity to that obtained with proven hydrated lime-fly ash-aggregate road base compositions. This helps to substantiate the viability of using kiln dust in these applications.

Five field installations of road base containing kiln dust prove that the material can be successfully used. It is obvious, however, that there are significant gaps in the information that is available. This is particularly true with regard to durability. There is also a need for larger, fully documented experimental field installations that will provide the type of information that will be convincing to potential users of road base materials.

5. At this time, there are no guide specifications or specifications for routine use.

6. It is quite clear that the energy and environmental impact of using kiln dusts is quite positive. Use of fly ash and kiln dusts in pozzolanic bases can result in 2.6 million pounds of waste use for each mile of 2-lane road. In addition, 1.2 billion Btu of energy may be saved. Also, air and water pollution may be reduced a small amount as a side benefit. Thus, use of these waste materials clearly results in substantial benefits.

Use of Rubber Tires in Highway Construction Products

One of the most persistent and troublesome problems facing municipal landfill operators is rubber tires, which cause numerous operational problems. Nationally, 2.7 million tons of rubber tires are discarded annually. While the largest volumes of waste occur in major population centers, virtually every landfill in the country receives some rubber tires.

In this study utilization of waste tires in asphalt-rubber compositions for highway construction was evaluated. The two primary products are stress absorbing membranes (SAM) and stress absorbing membrane interlayers (SAMI). The SAM is usually used in the form of a thin layer on top of a pavement, frequently as a "chip seal." The SAMI is a thin layer of asphalt-rubber which is subsequently overlain with a conventional asphalt concrete wearing course. These uses consume approximately 4 tons of waste tires per lane-mile of highway.

The use of asphalt-rubber has grown from an estimated 500 tons in 1970, to 33,000 tons in 1980. Although it is potentially available anywhere in the country, most of the miles of installed product are in Arizona and Texas, with significant mileage also being installed in Saskatchewan Province, Canada. At present, these products are covered by patents.

On the basis of these costs, reflecting actual bids received during 1980 in the City of Lancaster, it would appear that even more substantial cost savings, on the order of $5.00 to $6.00 per square yard of pavement, can be realized by use of the pozzolanic base alternative. When analyzing the comparative costs of ALP and BCBC out of the plant, it is evident why ALP is the less costly alternative. Bituminous base in the Philadelphia area presently sells for approximately $20.00 per ton F.O.B. plant, while ALP sells for $9.50 per ton F.O.B. plant. In Pennsylvania, these two materials are structurally equivalent.

4. Three State Cost Comparison

The estimated costs for all three pavement alternates in Illinois, Ohio, and Pennsylvania for a flexible pavement with a structural number of 4.00 are compared in Table 5-6. These cost figures reflect actual bid costs for all materials and, as such, constitute an accurate current comparison of the cost of alternative pavement systems in each state.

The first and most obvious observation from Table 5-6 is that the pozzolanic base material is consistently the lowest cost alternative in all three states, with bituminous base second, and aggregate base third. The cost differential between pozzolanic base and bituminous base ranges from $1.50 to $3.00 per square yard. This difference represents potential cost savings of approximately $20,000 to $40,000 per mile of two-lane road.

A study of Table 5-6 also shows that total pavement costs in Illinois and Pennsylvania are basically quite similar, while comparative costs for the same materials in Ohio are somewhat lower, particularly the cost of the pozzolanic base. This simply points out the number of variables that must be taken into account when comparing cost figures for the same material from different areas. The most significant of these variables are labor, transportation costs, productivity at the project sites, and availability of materials. Despite these variables, the cost comparison discussed in this section of the report reflect a trend toward significant savings in cost from use of pozzolanic base materials in areas where such materials are available and can be supplied in sufficient quantity to prospective users.

In addition to the actual bid prices received in the three states, a theoretical calculation was made for 12 cities selected from all across the country. In each of those cities, current quoted prices were found for lime, fly ash, and aggregate. These costs were combined with an assumed value for manufacture and installation of LFA and bituminous base material and compared to an installed price for asphalt concrete. The result is in Table 5-7. As can be seen, LFA is less expensive in all cases.

Table 5-6

THREE-STATE COMPARISON OF PAVEMENT BASE COURSE COSTS
BASIC PAVEMENT DESIGNS
(Structural number = 4.0)

Illinois			Ohio			Pennsylvania		
BAM	PAM	STONE	BIT	POZ	STONE	BCBC	ALP	CABC
3" wearing	3" wearing	5" wearing	3" wearing	4" wearing	5" wearing	1.5" wearing	1.5" wearing	1.5" wearing
8.5" base	10" base	15.4" base	8.4" base	9.5" base	16.1" base	6" base	2" binder	2" binder
						10" sub-base	5" base	8" base
11.5" total	13" total	20.4" total	11.4" total	13.5" total	21.1" total	17.5" total	6" sub-base	10" sub-base
							14.5" total	21.5" total

COST COMPARISON

Illinois			Ohio			Pennsylvania		
BAM	PAM	STONE	BIT	POZ	STONE	BCBC	ALP	CABC
$ 4.64	$ 4.64	$ 7.74	$ 4.52	$ 6.03	$ 7.53	$ 3.30	$ 3.30	$ 3.30
12.87	10.87	8.75	11.19	6.60	9.08	10.20	3.00	3.00
$17.51	$15.51	$16.49	$15.71	$12.63	$16.61	4.15	6.00	8.00
	(Low)			(Low)		$17.65	3.75	4.15
							$16.05	$18.45
							(Low)	

Table 5-7

THEORETICAL STABILIZED BASE COURSE PRODUCTS, 1980
(Price per square yard)

	Lime-Fly Ash-Aggregate (9 inches)	Asphalt Concrete (6.7 inches)
Kansas City, Missouri	4.90	6.10
Atlanta, Georgia	5.46	7.80
Dallas, Texas	6.56	6.95
Chicago, Illinois	4.06	8.81
Phoeniz, Arizona	*	5.78
Philadelphia, Pennsylvania	4.10	7.80
Cleveland, Ohio	3.64	6.61
Baltimore, Maryland	3.97	8.13
Detroit, Michigan	3.64	6.10
St. Louis, Missouri	5.65	4.74
Pittsburgh, Pennsylvania	7.35	9.24
Washington, D.C.	4.22	7.80

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* Price not readily available in Phoenix at the time of the survey.

Because of the systematic lower cost of LFA, the question arises as to why LFA is not more widely used. There are a number of reasons for this. A primary reason is that the impressive price advantage has not existed long. It is a result of recent price increases in asphalt. Also, in some locations stabilized bases are not used, and more inexpensive aggregate bases can be used. Another reason is that the patents on LFA have just run out (in 1980), so that entering the LFA market was restricted to licensee in the past. Also, fly ash of sufficient volumes and quality has not been available in many places in the past. In addition, new road construction is being carried on at a greatly reduced level in many places, so that potential demand for LFA is quite limited at present. There is, however, significant new construction taking place as added lanes to existing roads. Finally, when these other problems do not exist, the institutional barriers are still there including the fact that routine use specifications do not exist in most places.

However, the impressive cost savings documented here will likely result in the solution to many of the problems listed here. There is little doubt that LFA in many places in this country can result in significant savings.

ENERGY AND ENVIRONMENTAL ANALYSIS

The potential energy and environmental effects of procurement guidelines need to be evaluated in terms of their total effect. Any mining, manufacturing, construction or transport activity results in energy consumption, pollution, and damage to the environment. The question to be answered is whether the procurement guidelines will result in more of these undesirable effects or less.

To do this, it is necessary to consider all of the activities related to the end result of interest. Thus, for LFA base courses, it includes not only the actual laying of the LFA, but also all of the preceding operations. As shown in Figure 5-6, this includes mining, transporting, and processing of minerals and aggregates; and procurement, processing, and transporting of fly ash as well. This must be compared to comparable operations for conventional materials.

The two most common bases used under flexible pavements are bituminous concrete (black base) and crushed stone (aggregate). To some extent portland cement stabilized bases are used, but they are more commonly used under rigid pavements and therefore frequently are not a viable alternative. Recently, recovered materials have been used in stabilized (or pozzolanic) bases. The most common application using recovered materials is a lime-fly ash-aggregate (LFA) base. However, other recovered materials can be used in LFA variations, such as boiler slag as a partial replacement for aggregate; cement or lime kiln dust as a replacement for lime; and incinerator residue as a partial replacement for aggregate.

QUANTITIES OF KILN DUSTS GENERATED

At the present time it is estimated that the annual production of lime and cement kiln dusts is in the range of 10 to 14 million tons. The solid waste problem is large enough to be of national concern. In physical dimensions, 12 million tons would occupy a volume of 250 million cubic feet. Thus, the volume of kiln dusts would fill approximately 10 professional football stadiums each year.

Most of this waste is CKD. Although statistics are not available, current estimates are that 20 million tons of CKD are produced annually, with 8 million tons recycled internally. Thus, 10 to 12 million tons of CKD are presently being accumulated annually (References 6-1, 6-2, and 6-3).* In addition, it is estimated there are 100 million tons of the material that are reusable piled throughout the country.

The annual accumulation of LKD is considerably less than that of CKD. In a 1977 survey conducted by the National Lime Association (Reference 6-4), in which 60 out of 75 commercial lime plants responded, a reported 4,275 tons per day of dust were collected. It was estimated that this was two-thirds dry dust and one-third sludge. Of this amount, approximately 75 percent was wasted and 25 percent either sold or given away. If these data are factored up for 330 working days per year, for a 50 percent addition to adjust for captive lime plants, and for the non-reporting plants in the survey, the available annual output can be estimated as 1.3 million tons per year. Other sources suggest that this is approximately correct, although the value may be as high as 1.5 million tons per year.

Geographical Generation Patterns

As shown in Tables 6-1 and Figures 6-1 and 6-2, the latest available information on the location of cement plants shows 168 plants distributed throughout 39 states. Over half of these plants are located in eight states. In addition, the geographical distribution of the plants within these states indicates that CKD would be available within reasonable transportation distance at most locations. These states are: Alabama, California, Indiana, Michigan, Ohio, Pennsylvania, Tennessee, and Texas. Three other states have a significant number of cement plants but they are more or less concentrated in one section of the state. These states are as follows:

Kansas - plants are in the eastern portion of the state
Missouri - plants are in the eastern portion of the state
New York - plants are in the southeastern portion of the state.

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* See references at the end of the chapter.

Table 6-1

ESTIMATED ANNUAL GENERATION OF KILN DUST BY STATE

	Cement		Lime [1]		
	No. of Plants	Dust (10^3 tons)	No. of Plants	No. of Rotary Kilns	Dust (10^3 tons)
EPA Region 1					
Massachusetts	0	0	2	1	14
New Hampshire	0	0	0	0	0
Connecticut	0	0	1	1	4
Maine	1	75	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Total	1	75	3	2	18
EPA Region 2					
New York	7	674	0	0	0
New Jersey	0	0	1	1	150
Total	7	674	1	1	150
EPA Region 3					
Pennsylvania	15	1,232	7	6	215
Maryland	3	256	0	0	0
West Virginia	1	128	2	1	25
Virginia	1	111	5	4	76
District of Columbia	0	0	0	0	0
Delaware	0	0	0	0	0
Total	20	1,727	14	11	316
EPA Region 4					
Kentucky	1	70	2	2	50
Tennessee	6	304	0	0	0
North Carolina	1	111	0	0	0
South Carolina	3	335	0	0	0
Mississippi	2	192	0	0	0
Alabama	7	470	5	5	143
Georgia	3	238	0	0	0
Florida	5	508	0	0	0
Total	28	2,228	7	7	193
EPA Region 5					
Minnesota	0	0	0	0	0
Wisconsin	1	140	5	3	22
Michigan	5	1,116	3	2	133
Illinois	4	365	3	3	240
Indiana	5	240	1	1	80
Ohio	5	394	12	8	336
Total	20	2,255	24	17	811

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[1] Quantities of lime kiln dust represent estimated dust production from commercial lime plants. No similar data were available on dust generation from 65 captive lime plants at the time of this survey.

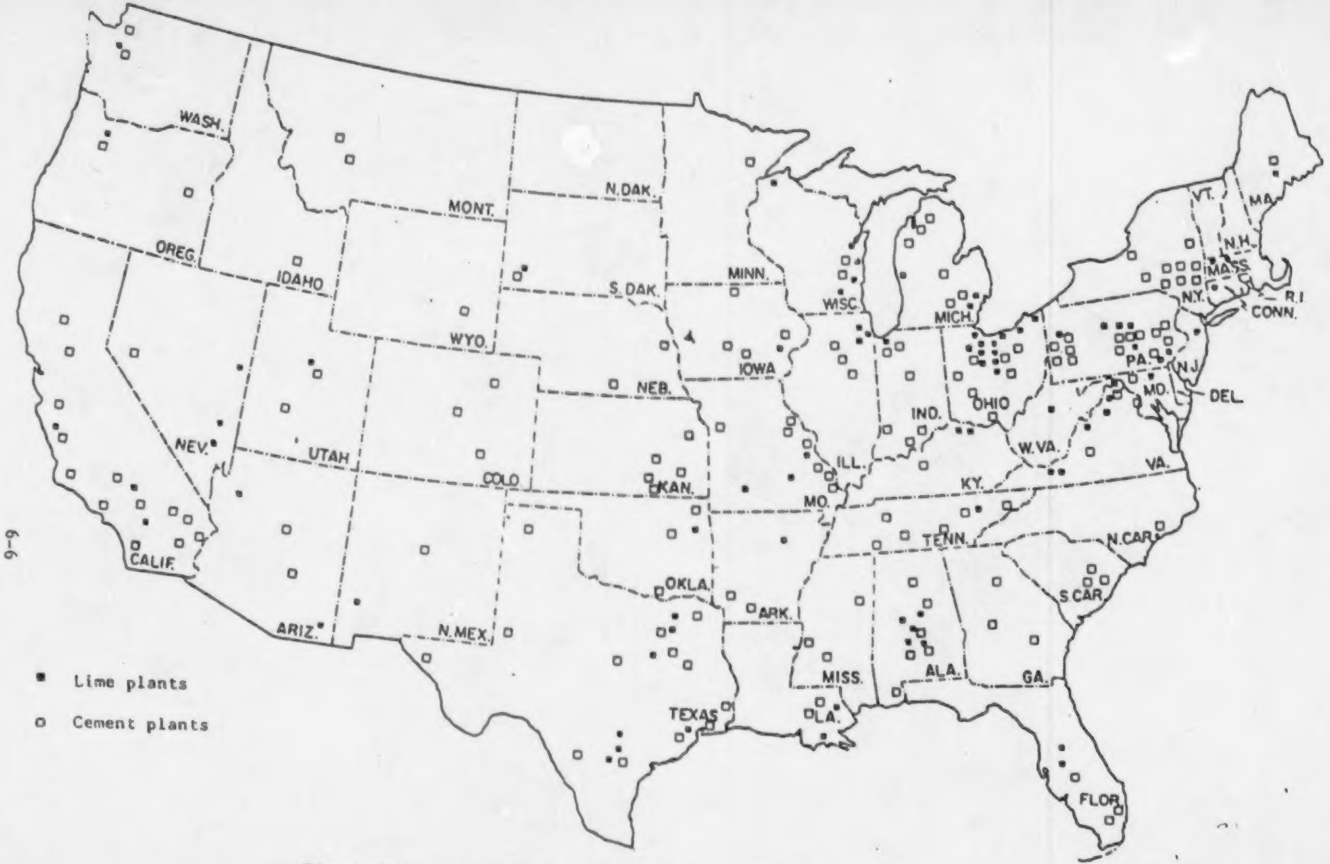
WASH.
OREG.
CALIF.
NEV.
IDAHO
MONT.
WYO.
UTAH
ARIZ.
COLO
N.MEX.
N.DAK.
S.DAK.
NEB.
KAN.
OKLA.
TEXAS
MINN.
IOWA
MO.
ARK.
LA.
WISC.
ILL.
MISS.
MICH.
IND.
KY.
TENN.
ALA.
OHIO
W.VA.
GA.
FLOR.
PA.
VA.
N.CAR.
S.CAR.
MD.
DEL.
N.J.
N.Y.
VT.
N.H.
MA.
MASS.
R.I.
CONN.
■ Lime plants
□ Cement plants

Figure 6-1. Location of cement and lime plants.

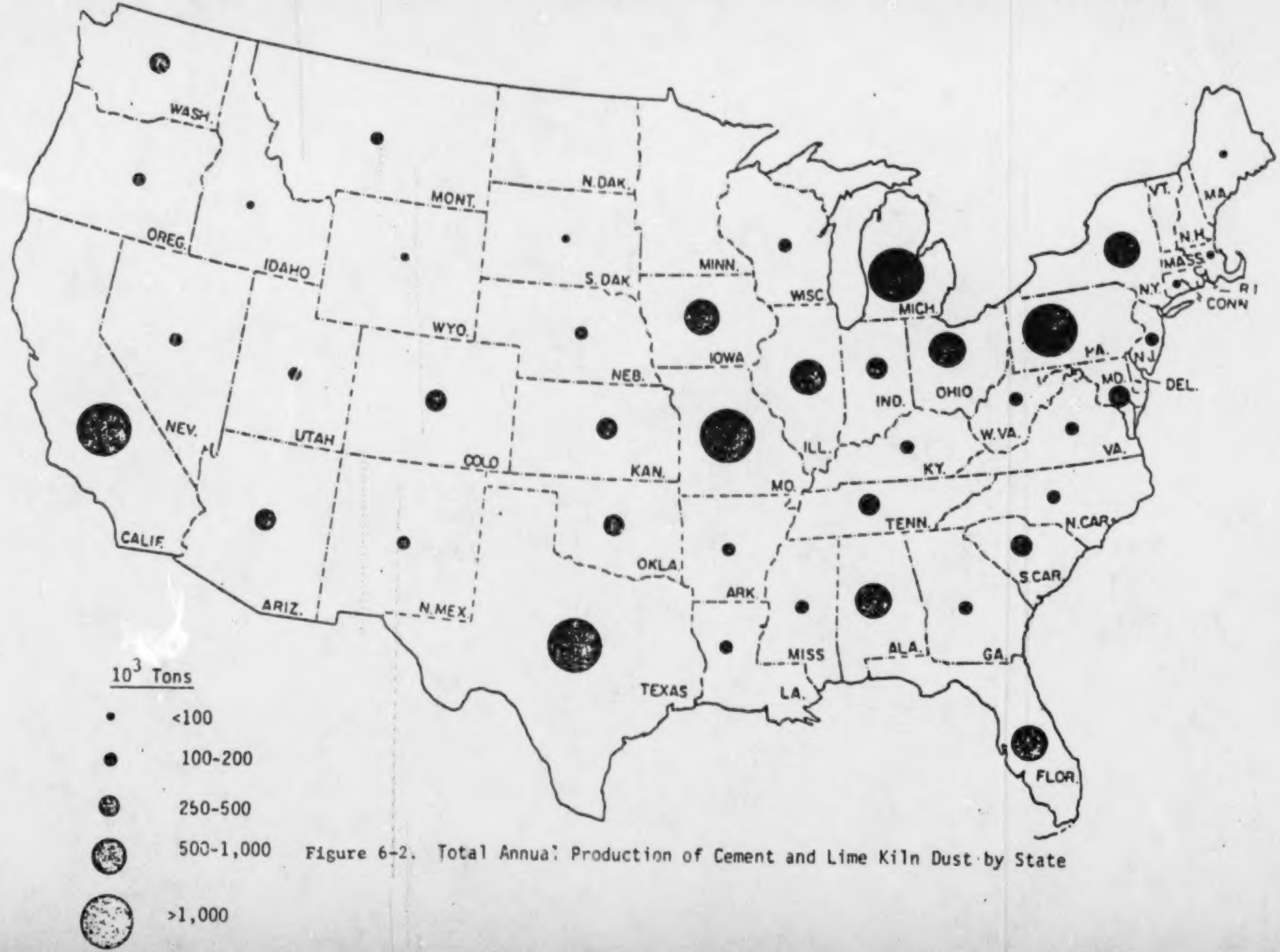
WASH.
OREG.
CALIF.
IDAHO
NEV.
MONT.
WYO.
UTAH
ARIZ.
COLO
N.MEX.
N.DAK.
S.DAK
NEB.
KAN.
OKLA
TEXAS
MINN.
IOWA
MO.
ARK.
LA.
WISC
ILL.
MICH.
IND.
OHIO
KY.
TENN.
MISS
ALA.
GA.
FLOR.
W.VA.
VA.
N.CAR.
S.CAR.
PA.
N.Y.
N.J.
MD.
DEL.
VT.
N.H.
MASS.
MA.
R.I.
CONN
10^3 Tons
<100
100-200
250-500
500-1,000
>1,000

Figure 6-2. Total Annual Production of Cement and Lime Kiln Dust by State

Table 6-1 shows that there are 61 commercial lime plants in 30 states that have rotary kilns. There are 20 plants that have vertical or other kilns but no rotary kilns. It has been reported that there is minimum dust accumulation from vertical kilns. Based on the location of the rotary kiln plants, the following states appear to have the most available supply of LKD: Alabama, Ohio, Pennsylvania, Texas, and Virginia. These five states have almost half of the plants. It was reported in 1977 (Reference 6-5) that six states, Ohio, Pennsylvania, Missouri, Texas, Michigan, and Alabama, accounted for 57 percent of the total output of lime. In addition, it is known that LKD is available in the Chicago area which would add Illinois to the list of states. Combining these into one tabulation produces a list of eight states: Alabama, Illinois, Michigan, Missouri, Ohio, Pennsylvania, Texas, and Virginia. It is believed that this is a fair representation of the locations of the most plentiful sources of LKD in the United States. Twenty-seven states report no lime production at all.

Current Use Patterns

Kiln dusts have become prevalent only in the last ten years. Although some pollution control has been practiced for many years, it has only been within the past decade that new air pollution control requirements have resulted in such large quantities. Because of this, markets for kiln dusts are just now being developed.

A major problem is quality control. Because the kiln dusts do not have sufficient value, care has not been taken to produce dusts of uniform composition and condition. This precludes most market opportunities. However, in some cases it has been possible to reuse dusts as a raw material in the plant in which they were generated.

Recycling of CKD is routinely practiced in many cement plants. It is estimated that 6 to 8 million tons are reused annually. However, this is possible only to the extent that the alkali content of the final cement product does not exceed allowable levels. Depending on the raw materials at a given plant, the alkali level in the CKD may be quite high, and its introduction as a raw material will cause an adverse effect on the final product. Another common use of CKD is as a substitute for limestone in agricultural applications, but this also depends on the composition of the CKD.

Some LKD is recycled internally, but it is also frequently sold into other markets. In some cases it is also used as a substitute for agricultural limestone similar to CKD. When LKD is of sufficiently high quality, it is sold as a hydrated lime product. It is used for soil stabilization in isolated cases when lime is in short supply. In some cases, a blend of lime and LKD is sold as a lime substitute. In the Chicago area, a blend of LKD and lime is sold under the name of "Polyhydrate." It contains as much as 80 percent LKD. Recent applications of LKD include sludge stabilization and flue gas desulfurization.

KILN DUST PRODUCTS

Description

The primary application of both kiln dusts would be as a replacement (or source) for the lime in lime-pozzolan-aggregate road base compositions. CKD can also be used in combination with fly ash or by itself to produce a stabilized composition for use as a road base or structural fill. One other application in highway construction is the use of LKD as an antistripping agent and/or filler in bituminous compositions.

Kiln dusts have additional potential in any highway application for which hydrated lime is used. This would include soil stabilization, combination with sulfate wastes to form stabilized base material, and treatment of wet, plastic subgrades. Although the use of kiln dusts in these applications has been largely unproven, it is anticipated that it will provide a similar product to that where the usual hydrated lime is used.

Dusts provide a considerable advantage over the use of lime, in that they are produced as a waste product, and therefore are lower in cost than lime. Then, dusts can be used in areas where use of lime is not feasible because the transportation costs would make the cost of lime prohibitive. Also, it has been reported that lime is frequently not readily available for highway projects, because production of lime from many plants is substantially committed to other customers. In these cases, the kiln dusts make it possible to extend lime supplies.

Commercial Availability of Products Containing Kiln Dust

The primary product discussed here is the use of CKD or LKD as a replacement for lime in lime-fly ash-aggregate stabilized base materials. At the present time this product is not commercially available in most parts of the country. It is patented and licenses are currently being made available to manufacture and install this product. Thus, at this time the lack of commercial availability would create serious problems for a guideline which would be written to encourage widespread use. However, it is possible that this product will be widely available soon.

Quality Control

A major disadvantage to the use of dusts is the extreme difficulty of obtaining adequate quality control. Changes in raw materials at the cement and lime plants, changes in daily operating parameters, and plant upsets change the chemical composition and physical characteristics of the dust. Testing of dusts from many plants has been done, and in many cases the dust is simply not usable. However, as the dust becomes viewed more as a coproduct of the plant, this situation will improve, and usable dust will be available from many plants. Nevertheless, because of differing raw materials used in cement plants, some will never produce a dust with a chemical composition that is satisfactory.

In the case of fly ash, an important factor which has increased the quality control is the presence of brokers and marketers of the fly ash. Because this is their primary business interest, they take frequent samples and work closely with plant production people. They can guarantee quality fly ash to a customer. This same system is now developing for kiln dusts, so the problem of quality control is being rapidly reduced.

Locations of Producers

Only three companies have been engaged in the past in providing kiln dust-fly ash-aggregate compositions for field installations. These companies are:

- Nicholson Industries, Toledo, Ohio
- Gallagher Asphalt Co., Chicago, Illinois
- City Wide Asphalt Co., Sugar Creek, Missouri

These are the only organizations which would be capable of supplying the material now to local clients. Although the commercial availability is quite limited at present, it is reported that this list is rapidly expanding.

While there are only a few plants that have had experience with kiln dust road base compositions, there are many that could supply the material in a relatively short period of time. These potential suppliers fall into two categories. The first category are those who have in the past or are currently engaged in supplying lime-pozzolan-aggregate base course materials. It would be necessary only to replace the hydrated lime in one of the storage bins with kiln dust and possibly recalibrate the feed system for the new mixture. The second category are those mixing plants that normally supply bituminous mixtures and/or portland cement concrete. With some addition of bins and conveyors, it is conceivable that any of these plants could readiliy (within a matter of months) be fitted to produce "pozzolanic concrete" using kiln dusts.

In addition to these possibilities, it has been estimated that a new plant could be put into operation within approximately 9 months--assuming there would be no excessive delay in obtaining the required equipment. The plants are not very sophisticated to assemble or to operate.

The availability of producers is not considered to be a deterrent to the expanded use of kiln dust.

Current Use Patterns

At the present time only five field tests have been installed with no large commercial applications to date. These test installations are described in detail beginning on page 6-13. Thus, no significant use pattern exists at this time.

Potential Use

The potential for use of kiln dusts is as a replacement for lime in lime-fly ash-aggregate (LFA) material is of course dependent on the use of LFA, and the availability of kiln dusts in proximity of LFA applications. It is estimated that 738,000 tons of LFA were produced in 1979. If kiln dust is used at the rate of 8 percent of the final material, a total replacement of the lime would have resulted in 59,000 tons of kiln dust being used. This is on the order of one-half of one percent of the kiln dusts disposed of in 1979, and therefore would be an insignificant use of waste on a national scale.

Because LFA has not yet achieved much more than moderate use, any calculations of potential use are little more than quite rough estimates. However, in order to determine if use of kiln dusts might even remotely be of importance, a ballpark calculation can be made. LFA can be considered as primarily a replacement for hot-mix asphalt base. In those applications, it can be assumed that 1.3 tons will functionally replace 1.0 tons of asphalt base. If LFA utilizes 8 percent kiln dusts, then, 0.10 ton of kiln dusts will be used for each ton of asphalt base replaced.

In 1978, 90 million tons of asphalt base were used. Kiln dusts are available in only about 75 percent of the states, so as a rough estimate 68 million tons of black base could theoretically even be a candidate for replacement. In the next decade, it is unlikely that kiln dusts could be utilized in replacements for more than 10 percent of this amount, or 6.8 million tons of black base. This would be a use of kiln dust of only 0.68 million tons, or only 6 percent of the kiln dusts solid waste problem in the country.

These estimates are admittedly quite rough, but they do show the potential for small but significant use of a waste material which is of national concern.

TECHNICAL ASSESSMENT

Field experience with kiln dust compositions is limited. Details on experimental road bases that have been in service for as much as four years are presented later in this report. Laboratory studies, however, are of much more significance than they ordinarily would be because of the close similarity to lime-fly ash-aggregate compositions which have a long history of performance. In addition, it is important to note that the compositions can be improved by small additions of portland cement.

More technical details concerning this discussion can be found in Part 2, Volume 2, where supporting data and discussion may be found.

Laboratory Investigation - Cement Kiln Dust

Compressive Strength and Density. The laboratory investigations of compressive strength were made in accordance with generally accepted standards for the evaluation of compositions of this nature. Much of the testing was done in accordance with ASTM C593, Fly Ash and Other Pozzolans for Use with Lime.

The observations show that the compressive strength and density characteristics of cement kiln dust, fly ash, aggregate compositions are typical for stabilized materials. In particular, they closely resemble results that would be obtained with lime, pozzolan, aggregate compositions. Secondary compressive strengths in the range of 600 to 1,200 psi are common, with continued strength increases up to 90 days.

Durability

The resistance to freezing and thawing of compositions containing CKD has been measured by the methods of ASTM C593. This method specifies that the compressive strength of vacuum saturated specimens should be used as a measure of freeze-thaw durability. A compressive strength of 400 psi is required on specimens that are vacuum saturated after being cured for 7 days. The results of a number of these tests are shown in Part II, Volume 2. The data represents compositions made from cement kiln dusts from five different sources. In each case, the minimum strength required for acceptance was obtained.

Autogenous Healing. There is significant evidence that compositions containing CKD possess the property of autogenous healing. Autogenous healing is the property that enables compositions that gain strength slowly over a long period of time to regain strength after their original strength has been exceeded and cracks have formed. It is typically evaluated by testing specimens in compression that have been previously tested to failure. The property of autogenous healing is of obvious benefit for a road base composition. It insures that continual rejuvenation of the structural capability of the base will take place over a long period of time. Damage to the pavement that is caused by temperature changes and load applications is neutralized by the continuous healing. Strengths of 100 percent to 160 percent of original have been measured after 2 to 4 months.

Laboratory Testing--Lime Kiln Dust

Compressive Strength. Compressive strength evaluations of potential base compositions utilizing lime kiln dust are performed in a manner identical to those where cement kiln dust is used. The laboratory data that were available for review on LKD was substantially less than for CKD. On the examples tested the seven-day strengths are on the order of 325 to 850 psi, slightly lower than a comparable lime-fly ash-aggregate composition.

Durability Tests. Limited data on freeze-thaw testing is available. However, the samples seem to be typical of hydrated lime-fly ash-aggregate compositions, in that there is a continued strength gain after twelve cycles of alternate freezing and thawing. The ability of the material to gain strength after a long period of adverse temperature variations indicates that any deterioration caused during cold weather will tend to correct itself when the temperature rises (probably at 55°F or higher).

Field Installations

Cement Kiln Dust. A number of field installations of road base consisting of CKD-fly ash-aggregate compositions have been made and are periodically evaluated. Table 6-2 shows the locations and extent of these installations together with other pertinent data.

Specimens have been removed from some installations and tested in compression. The most complete documentation of the performance of a field installation has been made on a road base in a concrete plant drive in Silica, Ohio. Test strips of six different mixes, each 100 feet long, were placed at this location. It is reported that "A total of 25,820 equivalent 8,165 kg (18,000 pounds) single axles were recorded in six months with no cracking or surface damage visible except for a localized area."

More recently, a recognized expert in the performance of stabilized road bases, inspected the Sherwin-Williams Company plant drives in June of 1980, approximately three years after they were constructed. He reported that the installations were in excellent condition. There was only a slight amount of cracking which is typical of stabilized bases of a similar type. The bituminous wearing surface was adhering properly to the base material.

Lime Kiln Dust. The Chicago area has been using a "polyhydrate" lime in lime-fly ash-aggregate compositions for several years. "Polyhydrate" lime can contain as much as 80 percent lime kiln dust and 20 percent quicklime. This experience has been successful and illustrates an application of LKD not previously identified.

The first field application of lime kiln dust using the formulations discussed in this report is scheduled for early November 1980 in the Toledo, Ohio area. Developers of the material feel that it will perform in a manner similar to the cement kiln dust compositions. This is based on the fact that the major constituent of portland cement is limestone and the sole raw material of lime is also limestone; therefore, the dust resulting in the processes should be similar. An examination of the chemical compositions of each indicates that there is a close similarity between cement kiln dust and high calcium lime kiln dust. No other field installations outside of the Chicago area of LKD were reported.

Table 6-2

FIELD INSTALLATIONS - CKD ROAD BASE COMPOSITIONS

Name and Location	Date Installed	Size	Thickness (Inches)
Silica, Ohio Plant Road	11/5/77	Six strips each 100 feet long	10
Meadowbrook Estates	October 1976	L 2,670' W 24' - 36'	5
Streets and Mobil Home Park	October 1976	L 220' W 24'	5
Toledo Express Airport Parking Lot	November 1978	5,000 square yards	8
Sherwin-Williams Company Plant Drives, Chicago, Illinois	10/19/77	L 500' W 30 '	6 to 10
John Ousky Park Parking Lot Oregon, Ohio	10/21/77	6,000 square yeads	5 to 6

Source: N-Viro Energy Systems, Inc., Toledo, Ohio.

Summary--Technical Assessment. The documentation that is available shows that kiln dust, fly ash, aggregate compositions have considerable potential in a road base application. The advantages are generally summed up in a recent report (Reference 6-6), and they are as follows. "Substitutions of CKD in place of lime to obtain a pozzolanic mixture provides at least three advantages.

a. Lower cost of material.
b. Enhancement of the environment by consumption of waste products which would otherwise require the use of land and other resources to store in a proper manner.

c. Lower energy consumption per mile of pavement, since both fly ash and CKD are by-products requiring virtually no energy for their production."

The laboratory data, which is mostly compressive strength testing of various compositions, shows a striking similarity to that obtained with proven hydrated lime, fly ash, aggregate road base compositions. This helps to substantiate the viability of using kiln dust in these applications.

There is also evidence to show that the variability of kiln dust, which is one of the chief disadvantages claimed by some, is not as great or as significant as has been stated. Sampling procedures for the kiln dust in the past appear to have largely ignored good sampling techniques and the process by which the material is produced and stored. Studies are now underway to verify the consistency of the significant properties of cement kiln dust when the material comes from a given location in the collection process. There appears to be no reason why the kiln dust should vary significantly if the raw materials and operating procedures of the plant remain constant. It is obvious that control of these two factors is also of vital importance to the quality of the primary product--cement or lime.

Five field installations of road base containing kiln dust prove that the material can be successfully used. It is obvious, however, that there are significant gaps in the information that is available. This is particularly true with regard to durability. There is also a need for larger, fully documented experimental field installations that will provide the type of information that will be convincing to potential users of road base materials. The Federal Highway Administration (supported by the U.S. Department of Energy) requested and received proposals for the evaluation of Kiln Dust-Fly Ash Systems for Pavement Bases and Sub-based (RFP #DTFH61-80-R-00056) in January 1980. This project is a laboratory evaluation,but a followup project involving experimental installations in three states is planned. Projects of this type will go a long way toward providing some of the additional documentation that is required.

Kiln dust is a promising material whose use should be developed by support of experimental work, including field demonstrations, that will prove its value. It is essential that the combined FHWA-DOE project, described briefly in the previous paragraph, be implemented without delay. There are strong reasons for utilizing kiln dusts, beyond their applicability in highway construction. Of great importance among these reasons is the energy saving involved in the use of a material that requires virtually no additional energy in its production and a reduced energy consumption during construction when compared to materials it would replace. There are also environmental and economic benefits derived from reduced disposal requirements.

NATIONAL ASSOCIATION OF FURNITURE MANUFACTURERS

AND

SOUTHERN FURNITURE MANUFACTURERS ASSOCIATION

COMMENTS ON H.R. 6307

AMENDMENTS TO THE RESOURCE CONSERVATION AND RECOVERY ACT

BEFORE THE

UNITED STATES SENATE

ENVIRONMENT AND PUBLIC WORKS

ENVIRONMENTAL POLLUTION SUBCOMMITTEE

JULY 7, 1982

FURNITURE MANUFACTURERS ASSOCIATIONS
Office for Government Affairs

National Association of Furniture Manufacturers

The National Association of Furniture Manufacturers (NAFM) and the Southern Furniture Manufacturers Association (SFMA) are the largest furniture industry trade associations in the United States. Over ten billion dollars in sales are produced annually by domestic furniture manufacturers. Sales by NAFM and SFMA member companies represent the vast majority of that figure. Also, NAFM and SFMA members have home offices or facilities in almost the entire fifty states and over 275,000 employees.

We are pleased that the Senate Environment and Public Works Committee Subcommittee on Environmental Pollution has chosen to review amendments to the Resource Conservation and Recovery Act (RCRA) in H.R. 6307, which were approved by the House Energy and Commerce Committee on May 11, 1982. We are certain that the amendments embodied in H.R. 6307 have not been thoroughly studied especially as to their potential impact upon industries such as furniture manufacturing. The NAFM and SFMA continue to support, for at least one year, a re-authorization of the Resource Conservation and Recovery Act without amendments.

918 16th Street, NW • Suite 402 • Washington, D. C. 20006 • (202) 466-7362

Over the past six years, our industry has followed closely the efforts of the Environmental Protection Agency to devise regulations implementing RCRA. Many of EPA's proposals in this regard have been suspended, modified or amended in various ways; few have proved to be uncontroversial; and few have reached the point of actually being tested in industry. For the manufacturing facilities we represent who will be forced to comply with these new regulations, we anticipate tremendous costs, regulatory burdens, and further delays in an already-slowed production cycle. In fact, as EPA tests its new regulations under RCRA, the Agency itself may choose to make further changes. In any event, the process of devising a strong, cost-effective, balanced set of regulatory guidelines for the large generators of hazardous wastes is far from complete; in fact, the task has, as expected, proven to be monumental in scope and complexity for EPA.

It is this point, especially, which leads us to oppose Section 3 of H.R. 6307 which effectively removes the existing exemption for generators of 100 to 1000 kgs of hazardous waste per month. We are astounded that the Committee would judge EPA capable of applying its fragile RCRA regulations to potentially millions of small businesses. We do not view this amendment as resulting in a strengthening of RCRA; instead it will result in a weakening of the program for all generators as EPA applies its limited resources to prematurely expanding its RCRA program before it is perfected. Our larger generators will suffer from EPA being forced to put into effect inadequate, possibly incomplete regulations as it turns its attention to the new task of addressing smaller facilities. Our small facilities will suffer from the sudden onslaught of hazardous waste regulations originally intended to cover an altogether different category of generators. The proportionate cost of these regulations could, in many cases, actually be greater for small manufacturers forced to seek outside expertise, than costs for the larger, more sophisticated manufacturer.

The 1977 Bureau of Census, Census of Manufactures reported nearly 5,000 wood, upholstered, or metal household furniture manufacturing facilities in the U.S. Approximately half of those facilities employ fewer than 10 people. After years of working with RCRA regulations, we estimate that 90% of all furniture manufacturing facilities fall under the existing 1000 kg per month exemption. For our industry alone, the elimination of the exemption could mean an additional 4500 facilities added to the RCRA programs.

The supporters of H.R. 6307 have argued that small generators may be accounting for a significant percentage of hazardous waste. We are aware of no conclusive evidence to support that point. In fact, it is our understanding that EPA intends to analyze small facilities more thoroughly once its basic RCRA regulations are in place. This would allow for a much more rational approach to controlling hazardous waste --- the problem being defined first, and then being addressed by EPA. The Agency knows its own limitations; their schedule of priorities should not be disrupted.

The NAFM and SFMA also have serious objections to Section 6 of H.R. 6307, "Burning and Blending of Hazardous Wastes as Fuel". The furniture manufacturing industry has been a leader in the area of recycling production by-products for energy use. Most of our recycled material is wood, often in a raw state, or painted, varnished, or treated in some other way and burned in industrial boilers. None of these materials could be considered "hazardous waste." However, as Section 6 is written, the term "hazardous substance" is substituted for "hazardous waste", thus applying this set of regulations to our recycling process which can in no way be considered hazardous waste processing. This provision would be a disincentive for furniture manufacturers to continue their energy-conserving recycling practices. The costs and burdens of complying with Section 6, coupled with the many other RCRA-related regulatory demands, could be sufficient reason for manufacturers to turn to conventional (oil, coal) fuel resources. We are confident that the original philosophy behind the RCRA was one of balance between our nation's energy, economic, and environmental goals. Section 6 clearly violates that approach and thus must be amended to change "substance identified or listed under Section 3001" to "hazardous waste", or eliminated completely.

A final provision of H.R. 6307 of particular concern to our industry is

Section 7, "Section 3005 Permits", requiring an entirely new permit for expansions of capacity greater than 10 percent. The inherent delays and intrusions this will cause will be a further inhibition to revitalization of American industry. The need for expansion and modernization of the furniture industry, and all of industry, has never been greater. All existing generators already have, or should have, permits. If they desire to expand, the existing permit could simply be revised to reflect the added hazardous waste generated.

We appreciate the Committee's consideration of these concerns raised by the furniture manufacturing industry about changes to the Resource Conservation and Recovery Act.

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in the fields of
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June 24, 1982

The Honorable John Chafee
U.S. Senate
5229 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

This transmits a statement by the National Association of Metal Finishers (NAMF) concerning the recent amendments to the Resource Conservation and Recovery Act as reported by the House Energy and Commerce Committee. We hope that you will consider these views in conjunction with your scheduled hearing on RCRA and include them as part of the offical hearing record.

NAMF has been actively involved in educating its members on the requirements for implementing RCRA and is most interested in any possible changes to the Act. The amendments, as passed by the House Energy and Commerce Committee, contain several provisions that concern us and should be closely examined by the Senate.

The potential regulatory overlap and duplication by RCRA and the Clean Water Act is one issue that particularly warrants your attention. The attached statement elaborates on this concern and others.

Thank you for this opportunity to submit our views, and please contact me if you have any questions or require additional information.

Sincerely,

Robert Genereau

Robert Genereau
President, Stanley Plating Co., Inc.

Chairman
NAMF Solid Waste Disposal Committee

sb

Chicago Washington

The National Association of Metal Finishers (NAMF) appreciates this opportunity to express our views on the recent amendments to the Resource Conservation and Recovery Act (RCRA) as reported by the House Energy and Commerce Committee. Since no hearings were held by the House Energy and Commerce Committee on the proposed amendments, we are particularly grateful for your willingness to hear from the various interested groups affected by this legislation.

I am Robert Genereau, President of Stanley Metal Plating Co., Inc. of Forestville, Connecticut. I am representing NAMF in my capacity as a member of the Board and Chairman of the Solid Waste Disposal Committee.

NAMF is a nonprofit trade association whose members use a variety of metal finishing techniques including electroplating and other processes. Metal finishing provides an essential service to this country's manufacturers, including such industries as automotive, aerospace, defense, medical, jewelry, leisure and steel. Metal finishing extends the life of products and makes them more efficient and safe. Metal finishing also helps preserve certain natural resources.

Because of the nature of the materials that the metal finishing industry uses, we have developed a concern for safe and effective waste disposal technologies. In addition, we have had a long-standing involvement with the Clean Water Act and have worked closely with the Environmental Protection Agency (EPA) in implementing certain provisions of the act. Electroplaters were one of the first industries subject to categorical pretreatment standards established by the EPA. They are currently faced with a compliance date of January 1984 for the standards. In view of the pretreatment regulations, metal finishers have experimented with several pretreatment methods in attempting to comply with the regulations. However, I should point out that while NAMF is committed to the objectives of the Clean Water Act, we have serious problems with the current pretreatment standards. We are discussing with EPA several options to alleviate our concerns.

The recent actions in the House Committee on Energy and Commerce provide, in the words of several members of the Committee, "an excellent example of how our laws should not be made."[1] They were referring to the RCRA reauthorization amendments. The Committee report accompanying the amendments included the following statement:

> [We] feel that the approximately 12 changes to RCRA...were not properly aired during the hearing process. In some instances, the issues involved in these changes were not discussed during the hearings. In some cases they were, but only one side of the issue was heard. ... All parties who would be significantly affected by the changes should have had an opportunity to testify. Unfortunately, this did not occur. In fact, many of these parties are only now becoming fully aware of the changes. ... We are hopeful that some of the concerns of these parties will be considered before H.R. 6307 goes to the House Floor.[2]

We could not agree more and again want to express our appreciation for your willingness to hear our views. NAMF has had little time to consider the substance of the RCRA amendments, but we can offer you our preliminary views on some of the provisions. More specifically, there are several changes that cause us significant concern./

First of all, after years of steady progress in safe waste disposal, we are concerned by signs of policy differences and confusion. We sense a growing conflict between the proponents of two Federal acts, one providing for solid waste disposal and the other for clear water. The U.S. public and industry need a uniform policy to protect the environment from toxic and hazardous wastes.

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[1] House Committee on Energy and Commerce, "Report on Resource Conservation and Recovery Act Reauthorization," May 18, 1982, Minority Views on H.R. 6307 submitted by Reps. Jim T. Broyhill, Clarence J. Brown, James M. Collins, Ed Madigan, Tom Corcoran, William Dannemeyer, Bob Whitaker, Harold Rogers and Dan Coats, p. 39.

[2] Ibid., p. 38.

This policy must be thoroughly researched and well considered; it must carefully balance the dual mandates for a safe environment and a healthy economy. The balance must recognize especially the position of the small business owner; for, excessive or duplicative regulations and unclear policies impose burdens that can bring about his demise.

The House committee has called for a report considering the necessity of RCRA requirements being used to regulate waste being sent to POTWs. Our industry is currently investing millions of dollars to pretreat hazardous waste in accordance with Clean Water Act requirements. If the clean water regulations fail, from the Congress' perspective, to adequately protect our waterways from hazardous wastes, then perhaps those regulations ought to be reviewed and revised. Congress should not encourage EPA to regulate a single waste stream simuntaneously under two statutes.

Incidentally, we understand that the EPA is currently conducting a study of industrial and hazardous waste disposal under the Clean Water Act. It is focusing on how various toxic wastes may impair publicly-owned treatment works (POTWs). EPA aims to develop a national strategy to control toxic and hazardous discharges into POTWs. In light of this research, we find it perplexing that an amendment to the RCRA reauthorization (section four) requires EPA to conduct a study that is nearly identical. This exemplifies the duplication and policy confusion that we fear is emerging. Metal finishers are wondering which regulations they will have to follow. Or, will there now be two sets of rules? It would seem prudent for the policymakers behind the two acts to agree on a clear set of definitions and jurisdictional boundaries before enacting additional legislation. We can't afford to be placed in the middle of jurisdictional disputes between proponents of the two laws.

We are also concerned with the provisions in Section three of the House Bill that would lower the small generator requirements to 100 kg/mo from 1,000 kg/mo. The provision would for the first time subject much of the small business segment of the metal finishing industry to regulation under RCRA. The lowering of the exemption limit will further exacerbate the already crowded condition facing disposal sites.

NAMF is acutely aware of efforts to locate and develop effective treatment storage of disposal facilities (TSDFs). We anticipate having to send our rapidly increasing sludge load to TSDFs as soon as enough of them have been properly permitted by environmental authorities. Indeed, metal finishers look forward to the day when they will be able to dispose of their solid hazardous wastes in a uniform manner. However, that day is not here yet and there remains a severe shortage of sites for meeting existing RCRA guidelines and other disposal requirements. This condition challenges the wisdom of bringing numerous small waste generators under RCRA regulation.

We understand that the RCRA amendments require EPA to hasten its permitting process, as well as most all regulatory efforts designed to implement the RCRA amendments. While that seems a logical course to take, we were struck by the observations of several members of the House Committee:

> Further, we believe that many of the deadlines imposed on EPA by H.R. 6307 are unachievable. In many instances, EPA will be rushed to meet these deadlines, and will produce inadequate and/or indefensible regulations (that) will be litigated for years in the courts. Setting more realistic deadlines could perhaps help in reducing this endless stream of litigation.[3]

Further, in their rush to amend the RCRA reauthorization, House policymakers failed to consider the economic impact of the extended regulatory authority. The Energy and Commerce Committee Report lacked any discussion of this vital factor. As many as 150,000 small businesses could be affected by the small waste generator provision alone. Can they afford the investments required to comply with RCRA solid waste disposal rules? Based on our experiences with clean water regulations, it will cost small businesses many thousands of dollars annually to prepare the reports, invest in treatment technologies, purchase special containers, transport the wastes and perform other functions. Costs of this magnitude will have a severe economic impact of most small businesses. Requiring these investments could be particularly unreasonable if those same small businesses are already spending hundreds of thousands of dollars in order to meet requirements of the Clean Water Act. We appeal to the committee to carefully consider that impact.

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[3] Op. Cit., RCRA Report, Minority Views, p.39.

We do think the House committee is accurate in pointing out the need for small generator exemptions and commend them for that determination. However, we do not believe it is necessary for Congress to specify particular quantity thresholds for small generator exemptions. It is our view that this matter can more appropriately be left to the Administration's discretion. Elimination or lowering of the small generator exemption could pose severe economic problems on small businesses and should therefore, be subject to a thoughtful and comprehensive administrative review process as opposed to statutory mandate.

Thank you for this opportunity to present our view.

sb

6/24/82

National Retail Merchants Association
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STATEMENT OF THE
NATIONAL RETAIL MERCHANTS ASSOCIATION
BEFORE THE SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

Regarding
the "Small Generator" Provision of
Section 3 of H.R. 6307,
THE RESOURCE CONSERVATION AND RECOVERY ACT REAUTHORIZATION BILL

July 1, 1982

EXECUTIVE OFFICERS

Chairman of the Board
EDWARD F. GIBBONS
Chairman and Chief Executive Officer
F.W. Woolworth Co.
New York, New York

First Vice Chairman of the Board
WILLIAM P. ARNOLD
Chairman and Chief Executive Officer
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July 1, 1982

The National Retail Merchants Association ("NRMA") appreciates the Subcommittee affording it this opportunity to present its views on the Senate bill to reauthorize the Resource Conservation and Recovery Act ("RCRA") and on the so-called "small generator" amendment in section 3 of H.R. 6307, as it was approved by the Energy and Commerce Committee of the House of Representatives. As the nation's largest trade association for the general merchandise retail industry, NRMA's members operate 40,000 department, chain and specialty stores across the country. Their annual sales are approximately $175 billion and they employ nearly 3 million workers.

NRMA supports passage of S.2432 in its present form and vigorously opposes the enactment of the House's small generator amendment. The latter would impose needless administrative costs on many businesses and overwhelm the Environmental Protection Agency's (EPA's) ability to implement RCRA by forcing hundreds of thousands of facilities to file, for the first time, with the EPA as generators of hazardous waste. The House's small generator amendment should not, therefore, be enacted.

At the outset, NRMA would like to emphasize that the routine waste generated by retail stores and facilities does not pose any threat to human health or the environment and, therefore, it is not the kind of waste which should be subject to the detailed and costly requirements of RCRA. Retailers do not manufacture goods and, thus, do not generate the highly toxic or dangerous wastes that are the focus of control efforts under RCRA and EPA's regulations implementing RCRA. At a retail facility, spillage and breakage are the primary sources of wastes which could be classified as hazardous. However, it is always in a retailer's interest to minimize the amount of such waste and, in any event, these wastes typically are composed of, at worst, paints, solvents or perfumes, which, in the volume generated, simply do not present a significant risk to environment or to anyone who handles or disposes of them. Thus, in NRMA's view, the small incremental benefit which might possibly result from subjecting retailers to the full panoply of RCRA regulations would be wholly out of proportion to the cost to retailers and consumers of doing so.

Under the existing RCRA regulations, owners of facilities that generate less than 1,000 kilograms of hazardous waste per month are exempt from RCRA's paperwork requirements. 40 C.F.R. § 261.5. The House small generator amendment (section 3 of H.R. 6307) would eliminate this small generator exemption and direct EPA to promulgate within 18 months regulations governing the handling, transportation, and disposal of hazardous wastes by the owners of facilities which generate between 100 and 1,000 kilograms of hazardous waste per month. The amendment would, thereby, create an entirely new class of hazardous waste generators, including many hundreds of thousands of facilities, which would be governed by an entirely new and unique set of regulations. NRMA is concerned about the costs and liabilities this amendment would impose on its members, and the effect that it would have on EPA's ability to effectively implement other provisions of RCRA.

There are more than one million retail establishments in the United States. Under the existing RCRA regulations, the owners of each of these facilities must determine whether that facility generates less than 1,000 kilograms per month of hazardous waste, so as to fall within EPA's small generator exemption. Without a doubt, practically all of the waste which is discarded by retail facilities is not hazardous in any sense of the word. The vast majority of the waste is composed of cardboard, paper, and other packaging materials. Thus, as long as the cut-off point in EPA's small generator exemption remains at 1,000 kilograms, most retailers can, with a good deal of confidence, determine as a matter of common sense that their facilities qualify for EPA's small generator exemption.

However, o[illegible]housands of products carried in retail stores, some might w[illegible]azardous wastes if discarded (e.g., paints, solvents, pesticides, alcohol-based perfumes and colognes). Moreover, if a hazardous waste is spilled onto the paper products in a trash dumpster, the weight of the paper is included in the calculation of the total weight of hazardous wastes being discarded. If the cut-off point for a small generator exemption were lowered to only 100 kilograms (220 pounds) per month, most retailers could no longer assume that their facilities qualified as small generators. Instead, they would have to undertake the difficult and costly task of attempting to determine which, if any, of their wastes meet EPA's definition of hazardous wastes and what quantity of such wastes are discarded by each of their stores each month.

The task of testing and monitoring each store's wastes would be extremely difficult for a number of reasons. First, retailers do not manufacturer their products and, consequently, have limited or no knowledge of the precise formulation of each of the thousands of products they sell. Unfortunately, determining whether a particular substance is a hazardous waste under the RCRA regulations requires precisely the kind of detailed knowledge of a product's formulation that retailers do not have. Second, while a few of the largest retailers can employ qualified personnel to analyze each product and determine whether it meets EPA's definition of a hazardous waste, the overwhelming majority of retailers cannot afford to keep a chemist on their staff. Third, for even those retailers who have qualified staff, making a thorough appraisal of all of a facility's waste would be extremely costly, given the huge number of different products that a typical store carries. Finally, EPA's regulations for identifying hazardous wastes are so complicated, complex, and ambiguous that retailers are left in a quandary when they attempt to determine which, if any, of their wastes are hazardous. Thus, passage of the House's small generator amendment could impose enormous burdens on retailers.

Passage of such an amendment would also place retailers in the position of choosing from among three untenable alternative methods for complying with RCRA. The retailer could incur tremendous costs in an attempt to determine the precise amount of hazardous waste it generates. Since the number of products involved is so large and their chemical compositions are unknown (and may change), retailers would not have much confidence that their analysis and one conducted by EPA would yield the same results. The second alternative would be for the retailer to simply assume that it does not generate more than 220 pounds of hazardous waste per month and run the risk of incurring the civil and criminal penalties specified in RCRA if this judgment is wrong. Clearly, this is not the option either Congress or the industry would prefer. NRMA is concerned that the only alternative available if the House amendment is enacted would be for the retailer to file with EPA as a generator of hazardous waste. However, if even a small percentage of the country's nearly one million retailers chose this third option, EPA's resources would be quickly depleted and implementation of the truly significant parts of the RCRA program would be endangered.

Thus, none of the three alternatives provides a satisfactory solution to the potential problems posed by the House's small generator amendment. There is, however, a fourth solution to the problems which would not overburden EPA, waste resources, or endanger the environment: continuation of the present EPA small generator exemption.

EPA has only begun to deal with this nation's hazardous waste problem. The agency's limited resources should be devoted to identifying the major sources of dangerous wastes, implementing the system to track the generation and disposal of these wastes, and licensing hazardous waste treatment and disposal facilities. By rejecting the House's small generator amendment, Congress would allow EPA to focus its attention on these difficult tasks.

Therefore, NRMA urges this Subcommittee and the Senate to oppose the adoption of the small generator amendment included in section 3 in H.R. 6307.

COMMENT BY
NORTHERN TEXTILE ASSOCIATION
TO
SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

SENATOR JOHN CHAFEE, CHAIRMAN
JUNE 24, 1982

Northern Textile Association
211 Congress Street
Boston, Massachusetts 02110

The following statement is submitted by the Northern Textile Association in response to the announcement of a hearing by the Senate Subcommittee on Environmental Pollution to consider adoption of additional amendments to S 2432, which reauthorizes the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act through fiscal year 1984.

Northern Textile Association (NTA) is a trade association representing a diverse cross-section of the American textile industry. Association members include synthetic fiber and wool textile mills, pressed felt and cotton manufacturers, and elastic fabric producers. While the highest concentration of membership in Northern Textile Association is in the Northeast, members in the Southeast and far West are also active.

Our comment will address two amendments included in HR 6307, the House bill reauthorizing RCRA, which may be considered by the Subcommittee in its hearing to determine if further amendments should be included in the final language of S 2432. These amendments, if included in the Senate bill, would: 1) reduce the small generator exclusion level, which exempts small quantity generators of hazardous waste from federal hazardous waste regulations, from 1000 kilograms (kg) per month to 100 kg per month; and 2) require the Environmental Protection Agency (EPA) to regulate materials classified as hazardous waste which are allowed to be blended and burned as fuel and are currently exempted from hazardous waste regulations by RCRA.

I. Reduction of Small Generator Exclusion Level from 1000 Kilograms per Month to 100 Kilograms per Month

Northern Textile Association believes that the small generator exclusion level should not be reduced from 1000 kilograms per month to 100 kilograms per month under RCRA. EPA has not demonstrated that the so-called "loophole" which exempts generators under the present 1000 kilogram per month limit has caused environmentally-related problems. In states which do not have Phase I interim authorization programs from EPA to manage their own hazardous waste programs, regional EPA offices would be required to enforce regulations. It is quite likely that the proposed 90% reduction in the generator exclusion level would bring many smaller generators into EPA's enforcement universe, greatly overwhelming its enforcement capability and potentially encouraging illegal disposal of wastes through dumping into sewers or covert dumping into landfills.

NTA believes that state agencies responsible for promulgating and enforcing hazardous waste regulations best know the scope of hazardous waste production with regard to the degree of hazard and amounts of wastes produced. States which have received Phase I interim authorization from EPA to manage their own hazardous waste programs must regulate these wastes as stringently, or more stringently, than the agency in its standards. NTA surveyed the policies of the six New England states to determine what action each had taken with regard to the small generator exclusion. Two of the six states (Massachusetts and Rhode Island) allow no small generator exclusion; two others (New Hampshire and Vermont) allow an exemption of 100 kilograms per month; Connecticut and Maine allow an exemption matching the current RCRA limit of 1000 kilograms per month. While Connecticut and Maine allow higher levels of hazardous waste to be exempted from regulation, Maine requires that a manifest be used to track wastes to licensed disposal facilities, and Connecticut requires that either a manifest system be used or an annual report be filed by the generator to the state's Department of Environmental Protection. For states with Phase I interim authorization from EPA, the proposed 90% reduction is unnecessary because, in a number of cases shown, states have acted more stringently in setting standards than EPA after assessing the quantity and degree of hazard of wastes produced there. It is unrealistic to reduce the small generator exclusion level by 90% unilaterally because this treats all states as if they produce the same types of wastes.

To conclude, reducing the small generator exclusion to 100 kg per month for all generators will not improve environmental quality; reinstating federal solid waste management assistance in the form of grants and technical guidance to states requesting help will.

II. Requirement that EPA Regulate Hazardous Waste Materials Blended and Burned as Fuel

Congress, in its reauthorization of RCRA in 1980, passed the Used Oil Recycling Act (PL 96-483) which required EPA to determine to what extent waste oils could be recycled or reused for their energy value. Although required to make this determination one year after the passage of the Act on October 15, 1980, EPA has yet to decide the status of waste oils under RCRA. It seems quite likely that, if EPA is required to set standards for facilities which blend and burn wastes within two years of reauthorization of RCRA by this amendment, the agency will not meet the deadline. The six New England states which have Phase I authorization for hazardous waste management programs allow the burning of certain solvents on a case-by-case basis. NTA believes that state agencies responsible for environmental protection know the types of hazardous materials produced within each state which can be reused for energy purposes, and are in a better position to determine which of these materials may be burned beneficially. For example, in the state of Massachusetts, the Division of Environmental Quality Engineering allows the burning of certain waste oils (classified by the agency as hazardous waste) and spent solvents by companies at the site of generation. In considering requests to do this, the agency reviews equipment characteristics, components of the waste(s) to be burned, emission characteristics and impact on air quality, a worst-case analysis, and the probability that the waste stream approved for burning will not be changed. The state has compiled an interim list of solvents, listed by EPA as hazardous due to ignitability characteristics, which will be considered for burning. There are two major incentives for companies to burn waste solvents of this type: 1) the amount of hazardous waste produced by a company is reduced and 2) the amount of solvents burned will reduce a potentially significant amount of fuel oil, coal, or natural gas a company uses in its boilers. The beneficial burning of waste solvents which do not cause environmental damage meets the intent of RCRA.

It may be appropriate for EPA to provide technical guidance concerning the burning of hazardous waste as fuel for those states without Phase I interim authorization to manage hazardous waste programs. However, if companies located in states with Phase I authorization are required to report the types and amounts of hazardous wastes used as fuel to EPA, a duplication of effort will result, with further unnecessary administrative costs resulting from companies who already report to appropriate state agencies. In cases under EPA jurisdiction, enforcement problems could occur as a result of budget restrictions. NTA believes that state agencies are better able to enforce hazardous waste regulations and determine policy with regard to blending and burning of hazardous wastes as fuel than EPA.

Attached is a summary of the policies of the six New England states toward the burning of waste solvents and oils, the small generator exclusion, state hazardous waste regulation citations and appropriate state regulatory agencies.

In light of the foregoing facts and conclusions, Northern Textile Association believes that the two amendments reducing the small generator exclusion level from 1000 kilograms per month to 100 kilograms per month and requiring EPA to regulate hazardous waste materials blended and burned as fuel should not be adopted in the final RCRA reauthorization bill.

NORTHERN TEXTILE ASSOCIATION

State Policy On:

State	Small Generator Exemption Levels and Requirements.	Burning of Waste Oils	Burning of Waste Solvents	State Law Citation and Regulatory Agency
CT	exemption up to 1000 kg/month; generators required to file annual report or use manifest to track waste to licensed facility.	not listed on EPA list of hazardous waste. no permit needed to burn them at present time.	case-by-case approval necessary. Non-chlorinated solvents only.	Section 2554 CC, parts 1-48 of "Regulations for Connecticut State Agencies." (Department of Environmental Protection)
MA	no small generator exclusion. Small quantity generators (up to 1000 kg/month) sign manifest only. No annual report	classified as hazardous waste. Can be burned on site-specific basis; permission necessary from Div. of Air Quality Control.	site-specific approval necessary. Non-chlorinated solvents only.	Chapter 21 C, 310 CMR 30.000, "Hazardous Waste Regulations." (Department of Environmental Quality Engineering)
ME	exemption up to 1000 kg/month; however, wastes must be sent to licensed facility via licensed transporter. Small generators exempt from state inspection.	not listed as hazardous. No notification requirement. Must be accompanied by manifest if sent through Massachusetts.	case-by-case approval necessary. Non-chlorinated solvents only.	Chapter 850, "Hazardous Waste Rules, Department of Environmental Protection." (Department of Environmental Protection)
NH	exemption of 100kg/month allowed. No report or manifest requirements.	not listed as hazardous. Proposed policy would require companies to submit oil samples, specs of boiler, source and amounts of oil to be burned.	blanket exemption for recycled wastes, except if on EPA hazardous waste list.	Regulations for State Agencies 147-A, HE-P 1905, "Hazardous Waste Rules." (Bureau of Hazardous Waste Management)

State	Small Generator Exclusion Level and Requirements	Burning of Waste Oils	Burning of Waste Solvents	State Law Citation and Regulatory Agency
RI	no small generator exclusion. Generators must use manifest to track wastes to licensed facility.	on-site waste oil burning allowed. Permit necessary from Air Pollution Division for "exotic fuels."	non-chlorinated solvents can be burned on-site. Permit requirements same as for waste oils.	Title 2319.1, "Rhode Island Hazardous Waste Management Act." (Department of Environmental Management)
VT	exemption of 100 kg/month allowed. State must be notified by evergy generator, regardless of quantity produced.	listed as hazardous waste. Air Pollution Section may approve burning on case-by-case basis. However, no one has been given permission thus far.	case-by-case approval necessary. Samples of solvents must be analyzed prior to approval. Non-chlorinated solvents only.	Chapter 6, "Solid Waste Management Act", Section 6:601-617. (Hazardous Waste Section, Air and Solid Waste Division).

Pennzoil Company's
Concerns with the Reauthorization of the
Resource Conservation and Recovery Act (RCRA)

ISSUE #1

Lowering the limits for the small quantity generator exclusion.

GENERAL

We are opposed to any arbitrary reduction of the small quantity generator limits. The bill introduced by Rep. James Florio (D-NJ), H.R. 6307, as reported out of the House Energy and Commerce Committee, would reduce the small quantity generator cut-off from 1000 kg/mo to 100 kg/mo. The consequent effect would be the addition of 132,000* generators (sources or small business) to the RCRA management system. However, the resultant hazardous waste managed would increase by less than one percent*. EPA's administrative and enforcement staff is already stretched thin. Reduction of the limits could even result in a net increase in hazardous waste mismanagement due to less attention being paid to the large generators.

Proponents of this legislation have failed to: (1) demonstrate a need or a problem; (2) consider the impacts on the regulated community; (3) consider the impacts on the administrating agency; (4) analyze the cost versus benefit; (5) consider the impacts on the hazardous waste transportation and disposal industry. The present system should be improved and tested in lieu of swamping it with small quantity generators where a hazard has not yet been proven.

It is also important to recognize those sources affected by the proposed legislation: dry cleaners, gasoline stations, paint shops, exterminators, auto repair shops, film labs and schools, to name a few. These types of businesses cannot stay ahead of and comply with the complex and fluid RCRA regulations. Regulation of these sources for no or minimal environmental benefit is not consistent with the Administration's goal of reduced regulatory burden.

PENNZOIL'S POSITION

Pennzoil is associated with the operation of 750 gasoline stations and 28 fast lubrication centers which are potentially affected by these rules. Waste at these facilities consists of used motor oil, solvents and spent oil filter cartridges. The used motor oil and solvents are sold or given to oil reclaim dealers for recycling, while the spent filters are mixed in with the trash. We feel these are environmentally safe operations and should be free of complex hazardous waste regulation. We see no benefit in hazardous waste security programs, record systems, training programs and manifest systems for these facilities.

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*Data obtained from study for EPA by TRW Environmental Engineering Division, "Technical Environmental Impacts of Various Approaches for Regulating Small Volume Hazardous Waste Generators". EPA Contract #68022613 and #68032560.

If used motor oil is to be designated as a hazardous waste by EPA, as is expected, then almost every gas station, auto dealer, etc., in the country would be subject to the RCRA regulations under Florio's approach. We couldn't begin to estimate how many hundreds of thousands of generators would be added to the RCRA system if this were to happen.

It is Pennzoil's position that Congress and the EPA should put RCRA emphasis on siting and permitting new hazardous waste disposal sites and development of disposal alternatives. This should be done before increasing the number of generators subject to the complex and burdensome RCRA regulations.

The small quantity generator exemption is presently handled administratively and is not mentioned in the Act. Pennzoil believes that the current regulatory scheme should be improved without making hasty legislative changes which do not add further protection to the public health and welfare. It is not necessary to add language to the Act which lowers the small quantity generator exemption, however, we do suggest language be included which requires further study of this issue and determination of its impact on the environment.

ISSUE #2

Burning and blending of hazardous substances.

GENERAL

H.R. 6307 will regulate under RCRA the burning and blending of "hazardous substances" for energy recovery. "Hazardous substances" is a new and undefined term under the Act. This term broadens the scope of the Act far beyond management of solid and hazardous waste.

As currently written, the bill could have serious and detrimental affects on the petroleum refining industry. Refineries which plan major expansions to implement state of the art technology to recycle waste gases and off specification products could be severely hampered in their efforts by the "substances" language.

PENNZOIL'S POSITION

Pennzoil opposes the regulation of hazardous "substances" under RCRA. Inclusion of "substances" could result in the agency actually dictating process configuration. We already have industrial hygiene programs, environmental control programs and process audits which assure a safe environment for our workers and for the community. We oppose legislation which could be interpreted to allow Agency control over our internal processes. Pennzoil suggests that any reference to the term hazardous "substance" be changed to read hazardous "waste".

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SCA
SERVICES

STATEMENT BY SCA SERVICES, INC.

SUBMITTED TO THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

HEARING ON AMENDMENTS TO THE
SOLID WASTE DISPOSAL ACT
AND THE
RESOURCE CONSERVATION AND RECOVERY ACT

June 24, 1982

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SCA SERVICES

SUMMARY OF SCA STATEMENT ON RCRA REAUTHORIZATION

- SCA Services, Inc. is one of the nation's largest companies engaged in solid waste collection and disposal and in chemical waste collection, treatment, recovery and disposal. SCA is the industry leader in the high technology recovery and treatment of hazardous wastes and operates five chemical waste treatment and disposal facilities a complete research and development laboratory. SCA has proposed two new treatment facilities, the expansion of existing treatment facilities, and is now in the trial burn shake-down stage for a new commercial hazardous waste incinerator which will be the largest in the United States.

- SCA endorses the basic intent of the current RCRA regulations and the proposed amendments of H.R. 6307. SCA feels the regulations should be technology forcing and are vital to the environment and the hazardous waste industry. The current loopholes and gaps in the RCRA regulations are inhibiting the development of safer and more environmentally sound high technology treatment. Incineration and other treatment technology will continue to be discouraged if EPA regulations continue allowing hazardous wastes to be burned in unpermitted, unregulated, and uncontrolled off-site commercial and residential boilers or mixed with fuels and sold to unsuspecting customers, allowing small quantity generators to dispose of their hazardous wastes in sanitary landfills, and allowing land disposal of certain hazardous wastes that cannot be contained by landfill liner systems, regardless of physical state.

- SCA endorses H.R. 6307, the RCRA Reauthorization Act of 1982, as reported by the House Energy and Commerce Committee. It would establish essential outside deadlines for EPA to regulate all unpermitted facilities that burn hazardous wastes. SCA's independent studies conservatively indicate that the public is exposed to 1.2 million metric tons of hazardous pollutants emitted from unpermitted boilers burning hazardous wastes. SCA's permitted incinerator will be 300 times more efficient in the destruction of hazardous wastes than uncontrolled commercial and residential boilers. H.R. 6307 also proposes to curtail the unpermitted activities of the blenders and distributors of fuel laced with hazardous wastes. The bill would also reduce the individual small generator exemption which currently allows the generator to dispose of 12 tons of hazardous waste per year in sanitary landfills and furthermore, it would limit and deter liquid hazardous waste from being placed in chemical landfills.

- SCA believes H.R. 6307 does not go far enough. EPA should be given more explicit direction and shorter time frames for adopting interim controls, until such time as the more comprehensive regulations required by H.R. 6307 are in place. Specifically, SCA urges H.R. 6307 be amended to provide that:

(1) Anyone who produces and distributes a fuel containing hazardous wastes immediately notify customers (a) whenever any fuel contains hazardous wastes, (b) what wastes and concentrations are present in the fuel, and (c) what the BTU value is of the fuel prior to blending and after blending;

(2) Non-permitted facilities should be prohibited from accepting hard to burn, or extremely toxic, hazardous wastes, until such time as final, comprehensive operating and performance standards are in place;

(3) All non-permitted facilities now burning fuels containing hazardous wastes should be subject to minimal "good housekeeping" requirements, such as manifests, recordkeeping, monitoring, and waste analysis.

(4) The regulation of landfills should ban organic priority pollutants, regardless of whether they are a liquid, solid or sludge; and

(5) The Agency should be authorized to issue permits by rule and class permits for regulatory flexibility.

- SCA has made a major committment to the future of the RCRA program. SCA can and does play by the rules. It cannot continue indefinitely to compete with facilities that are allowed to burn the same wastes without complying with any rules. Regulations should be evenhanded to assure comparable protection of human health and environment from all methods of hazardous waste disposal and treatment.

SCA IS THE LEADER IN HIGH-TECHNOLOGY HAZARDOUS WASTE TREATMENT

SCA Services, Inc. is one of the largest companies engaged in solid waste collection and disposal and chemical waste collection, treatment, recovery and disposal. SCA's Solid Waste Group services commercial, industrial and residential customers throughout the United States. In the emerging area of high technology chemical waste services, SCA's Chemical Waste Division has assumed the industry leadership position in the recovery, detoxification, and incineration of chemical wastes.

SCA now operates five permitted and regulated chemical waste treatment and disposal facilities. SCA has begun trial burn shake-down activities at a new, commercial high-temperature chemical waste incinerator in Chicago that will be the largest in the United States. SCA has proposed two new treatment facilities while expanding its existing facilities.

Analytical laboratories are located at each SCA facility and are supported by a scientifically equipped research and development laboratory, which not only conducts the analysis necessary to develop specific treatment processes for each waste stream but also performs related consulting services.

SCA'S HIGH-TECHNOLOGY APPROACH IS KEYED TO FEDERAL AND STATE REGULATIONS

SCA endorses the basic intent of the current RCRA regulations and the proposed amendments of H.R. 6307. SCA feels the regulations should be technology-forcing and are vital to the environment and the waste industry. The current loopholes and gaps in the RCRA regulations are inhibiting the development of safer and more environmentally sound high technology treatment. Incineration and other high technology methods of treating hazardous wastes will continue to be discouraged if the EPA continues its present regulatory programs that allow:

- hazardous wastes to be burned in unpermitted, unregulated, and uncontrolled off-site commercial and residential boilers and cement kilns;
- hazardous waste to be blended with fuels and sold to unsuspecting customers;
- small quantity generators to dispose of their hazardous wastes in sanitary landfills; and
- land disposal of certain hazardous wastes that cannot be contained by landfill liner systems, regardless of physical state.

However, EPA's Administrator Gorsuch only this past Monday said "Incineration is clearly one of the most effective ways of disposing of hazardous waste...EPA wants to encourage it."

High technology treatment facilities are capital-intensive. SCA has recently invested over $20 million in its

Chicago incinerator, the largest commercial incinerator in the country. It will comply with all incinerator regulatory requirements. High technology treatment facilities also require long lead planning and investment incentive times. They must undergo extensive technical - and political - permitting reviews at all levels of government. SCA has worked with its host communities to overcome their natural concern about hazardous waste facilities but this, too, requires a substantial effort and committment. It will be increasingly difficult for SCA to continue commitments and investments in high technology treatment facilities unless EPA and Congress take strong and affirmative actions to discourage short-term, environmentally unsound, alternatives.

SCA ENDORSES H.R. 6307 - THE RCRA REAUTHORIZATION ACT OF 1982

SCA endorses H.R. 6307, the RCRA Reauthorization Act of 1982, as reported by the House Energy and Commerce Committee. It would establish essential outside deadlines for EPA to regulate all unpermitted facilities that burn hazardous wastes. SCA's independent studies conservatively indicate that the public is exposed to 1.2 million metric tons of hazardous pollutants emitted from unpermitted boilers burning hazardous wastes. SCA's permitted incinerator will be 300 times more efficient in the destruction of hazardous wastes than the typical commercial boilers operating today. H.R. 6307 also proposes to curb the unpermitted activities of the blenders and distributors of fuel laced with hazardous wastes. SCA finds the present regulatory environment of different standards being applied to facilities burning the same materials to be inequitable, unfair, and lacking in foresight. H.R. 6307 would reduce the individual small quantity generator exemption which now allows the generator to dispose of 12 tons of hazardous waste per year in sanitary landfills and furthermore, it would limit and deter liquid hazardous waste from being placed in chemical landfills.

SCA OPPOSES THE PRESENT REGULATORY EXEMPTION FOR FACILITIES THAT BURN HAZARDOUS WASTES IN BOILERS AND CEMENT KILNS, OR THAT BLEND OR BURN HAZARDOUS WASTE FUELS

SCA strongly opposes the present EPA regulatory exemption that allow facilities to burn hazardous wastes for the "primary purpose" of energy recovery without even minimal controls. While the EPA pursues the investigation, enforcement and prosecution of illegal and unpermitted releases and discharges of hazardous wastes on to the land and water, it has delayed and ignored its responsibility to even track one third of the nation's hazardous wastes which goes unregulated into boilers. We don't tolerate uncontrolled dumping of hazardous wastes into a stream or a sewer. We shouldn't tolerate uncontrolled burning of hazardous wastes in boilers and cement kilns, just because the "purpose" is energy recovery.

An incinerator regulated under RCRA must obtain a permit to burn hazardous wastes. It must demonstrate it is capable of achieving a destruction and removal efficiency (DRE) of at least 99.99% of the principal organic hazardous constituents (POHCs) in the waste feed. That means that a maximum, if any, of only 0.01% of the waste feed would be emitted into the atmosphere. Boilers and cement kilns do not have to be permitted under EPA's current regulatory exemption, and it is not necessary to demonstrate any minimum ability to destroy hazardous wastes or remove them from its air emissions.

An incinerator must control emissions of particulates and hydrogen chloride, through emission control systems such as wet scrubbers and/or electrostatic precipitators. Very few industrial boilers are equipped with such emission control equipment. Flue gas emissions of potential harmful combustion products and waste components are significantly lower (.01%) from incinerators than the potentially uncontrolled levels from unregulated boilers (3%).

Operating conditions are major determinants of the efficiency of an incinerator or boiler in destroying hazardous wastes. Incinerators are required to monitor operating conditions to assure the continued maintenance of the 99.99% DRE requirement. Monitoring requirements include combustion temperature, waste feed rate, air feed rate, and carbon monoxide emissions. No monitoring is required of non-permitted boilers.

Hazardous waste incinerators are designed to destroy a variety of wastes. A trial burn demonstrating performance is required, and sets the facility's operating conditions, which are incorporated into the permit. Boilers are designed for specific types and specifications of fuel. The substitution or inclusion of hazardous wastes in the feed can substantially reduce a boiler's ability to destroy hazardous constituents and increases the risk to human health and environment from hazardous emissions.

Boilers are not required to conduct any trial burns to determine operating and fuel parameters. Further, boiler operating conditions that maximize energy yield may be in direct conflict with optimization of hazardous waste destruction. For example, excess combustion air may be minimized to save fuel consumed, but it will reduce the air needed to oxidize and destroy all hazardous constituents. As a practical matter, the introduction of hazardous wastes normally requires higher excess air levels to ensure thorough combustion.

REGULATION OF INCINERATION OF HAZARDOUS WASTES AND FUELS BLENDED WITH HAZARDOUS WASTES

Over one year ago, SCA challenged the present EPA exemption in what has become known as the AMSA case. At that time SCA stated that the regulation will (1) adversely affect public health and the environment, (2) create a regulatory vacuum, and

(3) distort the utilization of different waste treatment technologies because of unequal government regulation. The past year has proven the validity of these comments.

(1) Public Health and Environment

The EPA has not evaluated the effect on human health and environment of its boiler exemption, an exemption of 20 million metric tons or one-third of the total hazardous wastes generated annually. If all facilities burning hazardous wastes met the EPA incinerator permit requirement of 99.99% Destruction and Removal Efficiency (DRE), a maximum of 4,000 tons of hazardous emissions would be released. A recent review of literature commissioned by SCA has preliminarily found that under actual operating conditions, non-regulated boilers achieve only a 97% destruction efficiency. This means that national emissions of hazardous materials under present regulatory exemptions could amount to 1.2 million tons per year!

EPA has only now begun to study the burning of hazardous wastes in boilers and cement kilns. This reversal of normal and prudent procedures, by deregulating first and then seeing what results from unregulated burning, is particularly questionable when EPA's 1980 background document to the incinerator regulation states "when known carcinogens are incinerated and if combustion conditions are not properly maintained in the incinerator, quantities of these compounds will be emitted from the stack and may affect the health of those humans exposed to them."

SCA consistently has taken the position that the paramount consideration for regulatory attention must be the emissions from a facility burning hazardous wastes. The purpose for which a hazardous waste is burned has little if any correlation with the statutory mandate to protect human health and the environment -- whether it is blended with other materials before being burned, or whether any particular energy recovery equipment is utilized.

A recent story in the New York Times underscores the public health concerns that led to enacting RCRA and regulating incinerators in the first place. The opening paragraph states that "Federal and state investigators are looking into reports that significant amounts of heating oil, diesel oil and gasoline have been adulterated with toxic chemical wastes before being sold to consumers in the New York metropolitan area." Describing the consequences of such adulteration, it states "Health specialists say that motorists who use adulterated gasoline and occupants of buildings where adulterated heating oil is used could be endangered, as could employees who handle the substances. The specialists also say the contaminated oil or gasoline could add to environmental pollution generally. Some of the wastes [specifically benzene] suspected of having been used have been linked to cancer." The article describes ongoing investigations by the New York Attorney General's office, two federal grand juries, and the New York State Select Committee on Crime.

On June 15, 1982 the Attorney General of the State of New York notified the EPA of its intent to initiate an action in Federal Court to compel the EPA to promulgate regulations for all facilities burning hazardous waste without regard to energy recovery. The letter states that the "EPA has effectively issued a carte blanche to industry to handle toxic waste material in any fashion."

(2) Regulatory Vacuum

Several facilities now burning hazardous wastes have asserted they don't have to comply with RCRA regulations because of the boiler and blender exemptions. No practical or objective test or standard exists to determine if they are in or out of the system.

The "primary purpose" test has never been defined. A boiler or cement kiln burning hazardous wastes or a blender of hazardous waste fuels, is not now required to comply with any minimal housekeeping requirements: no hazardous waste analysis, no recordkeeping, no manifest, no monitoring, not even a notice requirement to EPA.

This regulatory vacuum is not filled by the Clean Air Act. The National Emission Standards for Hazardous Air Pollutants (NESHAPS) are not effective to regulate incineration of hazardous wastes because none have been established for the potential hazardous pollutants and by-products produced by improper burning of wastes. Nor is a pollutant-specific standard helpful in dealing with an incinerator receiving widely varying waste feeds. Industrial boilers are typically regulated under the Clean Air Act for sulfur dioxide, nitrogen oxides, and particulate emissions, not for hydrocarbons, heavy metals and toxics, or combustion by-products which are emitted from incomplete burning of hazardous wastes. New Source Performance Standards don't apply to existing facilities or to small new facilities, now do they regulate these pollutants.

This regulatory vacuum has also precluded the public from effective participation in decisions regarding hazardous waste burning. The public is assured of information about RCRA regulated hazardous waste treatment facilities, and an opportunity to participate in permitting decisions, as well they should. The exemption for boilers and cement kilns merely because they burn hazardous wastes for the "primary purpose" of energy recovery, or of blenders because it is purported to be a "beneficial use" of hazardous wastes, reinforces all the public's concerns.

A regulatory program is for industry and government protection too, establishing objective standards and requirements to assure the public and regulators of a facility's compliance with those standards. It should not be used to undermine the purposes of the regulations by allowing wholesale exemptions under the guise of resource recovery or beneficial use.

(3) Uneven Regulation

The consequences of EPA's uneven regulations are particularly significant to a company like SCA. The boiler and cement kiln exemptions unevenly and unfairly regulate facilities that are burning the same materials.

SCA goes through significant effort to comply with RCRA requirements, to provide state-of-the-art, high technology chemical waste treatment to generators who are themselves complying with federal and state requirements. SCA also performs fuel blending in compliance with the RCRA regulatory program, notifying the customer of the constituents, characteristics, and BTU value of the fuel. SCA can and does meet EPA's performance and operating requirements. SCA can compete with other companies that are playing by the same rules. But it is unfair when the competitors are not playing by any rules, and it is harder when no one knows that they're even playing the same game.

SCA'S PROPOSED ADDITIONAL CONTROLS ON BOILERS AND BLENDERS

SCA believes H.R. 6307 does not go far enough. EPA should be given more explicit direction and shorter time frames for adopting interim controls, until such time as the more comprehensive regulations as required by H.R. 6307 are in place. Specifically, SCA urges H.R. 6307 be amended to provide that:

(1) Anyone who produces and distributes a fuel containing hazardous wastes notify customers (a) whenever any fuel delivery contains hazardous wastes, (b) what wastes and concentrations are present, and (c) what the BTU value is of the fuel was prior prior to blending and after blending;

(2) Non-permitted facilities should be prohibited from accepting hard to burn, or extremely hazardous wastes, until such time as final, comprehensive operating and performance standards are in place;

(3) All non-permitted facilities now burning fuels containing hazardous wastes should be subject to minimal "good housekeeping" requirements, such as manifests, recordkeeping, monitoring, and waste analysis; and

(4) The Agency should be authorized to issue permits by rule and class permits for regulatory flexibility.

H.R. 6307 requires that regulations be promulgated within two years to remove the present exemption for facilities that burn hazardous wastes, directly or as a blended fuel. Facilities that blend hazardous wastes to produce a fuel also should be regulated as hazardous waste treatment facilities. SCA acknowledges that the development of performance standard regulations cannot be done overnight. SCA never has taken the position that all facilities burning hazardous wastes should be treated exactly the same. Certainly no one would argue that incinerators now regulated under RCRA should be deregulated to the same extent as boilers and cement kilns. But cement kilns and boilers need not necessarily be subject to the exact same regulations as an off-site, commercial incinerator designed for thermally destroying all types of wastes.

EPA can develop performance and operating standards, for specific hazardous wastes, that set specific parameters of residence time, temperature, and turbulence in the combustion chamber. Distinctions could be based on degree of hazard and volume of waste. Toxic (and/or difficult to burn) wastes would require more stringent procedural and performance safeguards, including detailed waste analysis plans and trial burns. Degrees of hazard could be established initially for specific waste streams (based on their toxicity) or industries, much like effluent guidelines are to be established on an industry-specific basis. These would be the wastes that RCRA regulations really are intended to protect against, wastes that are problems regardless of the purpose for which they are incinerated. Additionally, facilities that handle a high volume of wastes could be inspected or audited more frequently.

Interim Measures

Until such time as the comprehensive permitting program required by H.R. 6307 is in place, immediate statutory controls should be imposed on the burning and blending of hazardous wastes to ensure that the RCRA mandate of protection of human health and environment is fulfilled. EPA is given direction in the House Report to phase in regulations, not to wait until the final performance standards are ready before doing anything. Rather than leaving this to EPA's discretion, self-enforcing and immediately implementable requirements should be provided in the statute.

Until such time as regulations are in place and a federally-approved notice form is available, within 90 days of enactment, any person who blends hazardous wastes as a fuel, or supplies such blended fuel, must notify the ultimate consumer that the fuel contains hazardous wastes and its BTU value (H.R. 6307 requires them to submit notice under Section 3010 within 90 days of enactment). The blender and distributor should also maintain records of their customers. In addition to the obvious environmental protection concerns, this is a consumer protection issue, too. People are unknowingly buying adulterated heating oil, which has a lower BTU value than fuel without hazardous wastes.

H.R. 6307 has been criticized for imposing too great a burden on small facilities. SCA believes there is no compelling reason for a school or apartment house to burn hazardous wastes. These facilities shouldn't be burning hazardous wastes under any circumstances, because facilities with small boilers are least likely to achieve any semblence of adequate destruction of wastes, or be properly operated or maintained.

As previously stated, all facilities burning hazardous wastes should be subject immediately and by statute to the RCRA housekeeping requirements. This should not wait for EPA rulemaking. They should also be required to submit sufficient engineering data on their facility to indicate that appropriate combustion conditions exist for destroying the wastes being burned. A class permit should be developed, distinguishing on-site, production-process related incineration from off-site, non-production commercial and residential facilities. Spot sampling and post-audit enforcement could accompany such class permits.

Certain wastes are known to be sufficiently hazardous or difficult to burn that EPA should prohibit their being burned in any non-permitted facility. This ban should remain in effect until a full regulatory program is in place. The heat of combustion hierarchy can be used to determine a cut-off point. An alternative interim control would be prohibiting any non-permitted facility burning any hazardous waste with more than 1/2 percent chlorinated hydrocarbons by weight.

- LIQUIDS IN LANDFILLS

SCA endorses the concept that land disposal should be the technology of last resort. Where there are technologies to treat or destroy wastes, they should be preferentially applied; that will ensure demand and adequate capacity. The regulations of landfills should focus on priority pollutant organic compounds, regardless of whether they are liquid, solid or sludge.

The imposition of a ban on landfilling certain classes of organic compounds has focused on liquid wastes. It has been assumed that organics in sludges and solids will not migrate. This assumption fails to recognize the dynamics of a typical landfill environment. An open landfill having a size of 210' x 285' in an area having an annual rainfall of 3.58 feet will be impacted by the generation of 1.6 million gallons of leachate from the precipitation. This analysis assumes no evaporation during the year this particular cell is open. While there may be some evaporation from a secure landfill, our experience indicates very little evaporation actually occurs in the eastern half of the U.S.. Sludges also add liquids to the landfill's total liquid load. Rainwater has the capability to wash out the water soluble organics from the sludges and solids and bring them in direct contact with the landfill liner structure, resulting in a similar effect as leakage of liquids from buried containers. Some of these water soluble solvents can then come in contact with compounds which are only soluble in the solvents, resulting in the leachate containing a variety of organic compounds. Thus, solidification of organics by mixing them with kiln dust, chemical absorbent, or garbage (co-disposal) is not a means of permanently binding these compounds. Unless the landfill can be operated in a dry environment, there is a great potential for rainwater to leach out organic compounds contained in solid and sludges and transport them to the liner system. Although leachate collection systems can be installed in the base of the landfill, the system may not be able to handle properly the liquid volume resulting from precipitation. Furthermore, as the height of the waste builds up on the landfill, the increased pressure provides an additional force to desorb the liquids that are contained in sludges and solidified wastes.

Thus, SCA strongly believes that the regulation of landfills, as proposed in H.R. 6307, should ban the land disposal of organic priority pollutants, regardless of their physical state (liquid, sludge or solid), unless it can be demonstrated that the pollutant cannot be leached out of the landfill.

- SMALL QUANTITY GENERATOR

SCA supports H.R. 6307's requirement that small quantity generator wastes be disposed of in Subtitle C permitted facilities. As a major collector of solid waste, SCA is concerned that small, unknown quantities of hazardous wastes pose significant safety risks to our employees. For example, an SCA truck transfer facility exploded, sending twelve people to a hospital and equipment was damaged, because of the disposal of exempt amounts of hazardous wastes. SCA policy is that its solid waste services are not to accept any hazardous wastes, in any quantity. Unfortunately, the small generator exemption gives the generator legitimacy to dump one ton a month of hazardous wastes without the garbage truck driver knowing what has been placed in the waste disposal bin. SCA also is concerned as an owner and operator of sanitary landfills that unknowing acceptance of small quantities of hazardous wastes may make SCA liable for releases of such wastes.

H.R. 6307 provides EPA with authority for flexibility in applying regulations to small generators. The development of a degree of hazard approach may soften the effects of restricting the present 1000 kg exemption. Small generators should be given added storage time without being subject to a storage permit, to facilitate economics of scale in collection and treatment. DOT transportation standards also should accommodate small generators, including allowing small generator waste to be carried on vehicles that do not require specific state regulatory approval. But until such time, SCA urges this Committee to require filing notice by anyone generating hazardous wastes in any quantity, manifesting of such wastes, and requiring that all such wastes be disposed of only in Subtitle C permitted facilities.

CONCLUSION

SCA has made a major committment to the future of the RCRA program. SCA can and does play by the rules. It cannot continue indefinitely to compete with facilities that are allowed to burn and blend the same wastes without complying with any rules. Regulations should be evenhanded to assure comparable protection of human health and environment from all methods of hazardous waste disposal and treatment. SCA endorses enactment of H.R. 6307, but urges that Congress enact more explicit statutory controls to ensure interim protection of human health and the environment until such time as the regulatory program mandated in H.R. 6307 is in place.

socma

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RE-AUTHORIZATION OF THE RESOURCE CONSERVATION AND RECOVERY ACT

The re-authorization of the Resource Conservation and Recovery Act is an issue before the Congress of deep concern to the small business community generally and to small chemical companies in particular. Of greatest concern to the small business members of the Synthetic Organic Chemical Manufacturers Association is the potential change to the present regulatory exclusion of small generators of hazardous waste without explicit consideration of the administrative burden imposed by such a change. We urge the Senate to enact a simple re-authorization that does not include substantive changes to the present law.

At this point, the House Energy and Commerce Committee has reported a bill that would reduce the level at which requirements for hazardous waste generators are imposed from 1000 kilograms per month to 100 kilograms per month. The House, in its consideration of these amendments, has not given an opportunity for small businesses, including the small chemical companies represented by SOCMA, to be heard. In the Senate consideration of the RCRA re-authorization, SOCMA urges that the concerns of small businesses be considered with care.

SOCMA recognizes that hazardous wastes even in small quantities should be disposed of in a manner dictated by sound environmental management. Ensuring that significant quantities of hazardous wastes go to RCRA-sanctioned hazardous waste disposal sites would further this goal. Acutely toxic wastes in amounts of one kilogram or more must be disposed of in permitted facilities under present regulation.

The Congress should consider, however, the complexity of applying full RCRA requirements on small companies which would come within their scope for the first time. The Senate should not follow the action by the House Committee, because it legislates regulation without definition of the administrative mechanism that would mitigate the burden and complexity of such regulation. The House Committee's failure to do so jeopardizes the objective sought — and thus the environmental benefit to be achieved — since small business may not have the capability to comply with RCRA's full regulatory requirements.

SOCMA urges the Senate to take special note of the concerns of small business through a simple re-authorization of RCRA. These concerns have not had a voice in the congressional changes being proposed.

SOCMA is a trade organization representing over 100 synthetic organic chemical manufacturers of which a majority are small businesses.

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